

# **Achieving Diverse Citizen Engagement:**

*An Evaluation of Seattle Public Utilities' Efforts to Engage Ethnic  
Minorities in Waste Prevention and Recycling*

By Sheryl Anayas

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Approved by:

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**David Harrison**

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## List of Abbreviations and Acronyms

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SPU.....	Seattle Public Utilities
WPR.....	Waste Prevention & Recycling
IR.....	Immigrant and Refugee Communities
SWD.....	Solid Waste Division
EJNA.....	Environmental Justice Network in Action
IDHA.....	International District Housing Alliance
EJPIO.....	Environmental Justice Pass It On
ECOSS.....	Environmental Coalition of South Seattle
TBL.....	Triple Bottom Line
RSJI.....	Race and Social Justice Initiative
ZWI.....	Zero Waste Initiative
CBO.....	Community-Based Organization
LHWMP.....	Local Hazardous Waste Management Program
SOCR.....	Seattle Office of Civil Rights
EJ.....	Environmental Justice
EO.....	Executive Order (12898)
RCSS.....	Residential Customer Service Survey
CWIMB.....	California Integrated Waste Management Board

## Executive Summary

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In light of Seattle Public Utilities' (SPU) upcoming solid waste service changes encouraging increased waste prevention and recycling (WPR) practices, along with Seattle's changing demographic make-up, SPU is increasingly concerned with how to best achieve diverse and widespread citizen engagement in order to reach its ambitious environmental goals. In particular, SPU is interested in understanding how to increase ethnic minority participation in its WPR services/programs as these groups often times face unique barriers to participation. Moreover, the purpose of this report addresses the following questions:

- 1.) How has SPU engaged racial/ethnic and immigrant communities (hereinafter referred to as "ethnic minorities") in its WPR programs/services?
- 2.) What are some barriers to engaging ethnic minorities in WPR? What are ways to address barriers?
- 3.) Is SPU's Environmental Justice Network in Action (train-the-trainer) model an appropriate model to help facilitate the involvement of these communities? What alternative strategies, if any, should be considered?

This research specifically evaluated SPU's ethnic minority engagement efforts through the work of its Environmental Justice Network in Action (EJNA) team—SPU staff tasked with directly outreaching to and educating such groups about environmental topics since 2002. Looking at the EJNA team's work appeared to be the most enriching avenue for understanding SPU's "track record" with involving these groups in City-encouraged WPR behaviors, as well as other efforts.

The principal findings indicate that SPU has made efforts to engage ethnic minorities in its WPR efforts by attempting to better understand such groups' WPR-related attitudes/opinions/needs via **surveys**, **focus group studies**, and through the **direct outreach and education** efforts of its EJNA team. However, despite the use of such evaluation and education tools, there is still a lack of specific data on the attitudes and behaviors these groups have towards WPR overall. Interviewee findings also reveal that SPU staff and CBOs (representative of ethnic minority groups' opinions) generally view the following as barriers to engaging ethnic minorities:

- **Language** – interviewees frequently noted that education and outreach materials were not always accurately translated, for example.
- **Culture** – concern with culture was largely tied to SPU staff being unable to relate to groups whose ethnic cultures and norms they were not familiar with;

thus, creating challenges for staff to address important issues such as how to best communicate with them.

- **Ethnic minorities’ lack of interest in WPR/environmental issues** – this was noted as a “commonly understood” barrier facing ethnic minorities because other priorities (such as sustaining an income, living in a safe neighborhood, etc) are often times more important to them.
- **SPU’s limited knowledge about ethnic minorities WPR-related attitudes and behaviors** – similar to bullet two (culture), this barrier reflects the need for SPU’s continued efforts to better understand the opinions and behaviors of these groups, which may/may not be similar to that of the general population.

The majority of interviewees said that **increasing ethnic minorities’ access to government resources** and ensuring such **resources are culturally relevant to target audiences** are the best ways to address these barriers. Also, similar to SPU staff interviewed in this research, ethnic minorities said there are various barriers which go beyond language that prevent them from engaging in WPR efforts.<sup>1</sup> This highlights that providing translation services is only part of the process to increasing ethnic minorities’ participation in WPR efforts. Moreover, the work of the EJNA team – which aims to provide more direct outreach to such groups’ via trusted community group leaders – is continuing to be viewed as having a positive impact on engaging them.

In fact, based on interview findings, the EJNA team has been successful in directly educating and outreaching to ethnic communities about WPR through its train-the-trainer direct education and outreach model. According to most interviewees, the EJNA model is successful because it helps to:

- **Build trust** between government actors and ethnic minorities;
- **Leverage limited SPU resources** to deliver environmental messages by using existing network of CBOs who are already “connected” and trusted by the community;
- **Go beyond translating** printed outreach materials;
- **Meets communities “where they are;”** and
- **Promotes culturally-relevant education and outreach.**

Specifically, the EJNA team has mainly educated ethnic minorities about waste prevention as part of an overarching message that is related to more specific environmental topics like “recycling” and “household hazardous waste.” Through

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<sup>1</sup> Ethnic minorities WPR opinions/concerns are represented via CBO feedback from 2008 Eco Village Training.

community presentations (often led by CBOs) at festivals/fairs, conferences, field trips, and tours, the EJNA team is able to promote environmental and environmental health messages, such as WPR. Whether the EJNA team's efforts are encouraging actual behavior change, however, is yet to be determined as current evaluation tools are not intended to measure this. Most interviewees also did not offer specific alternatives to the EJNA model. Instead, many felt that the EJNA team's outreach model could be modified to include:

- Increase youth involvement;
- A focus on outcome-driven (vs. output-driven) performance measurement;
- Increased staff and budgetary resources; and
- More partnership with others engaged in similar work.

Based on the findings and analysis presented, the following broad recommendations are thus offered to SPU as it continues in its ongoing planning process to further support the engagement of ethnic minorities in its utility programs/services.

***Recommendation 1:*** Tailor messages about WPR on existing and new SPU outreach and education materials that discuss these topics so that they are culturally relevant to target audiences.

***Recommendation 2:*** Allocate more resources to researching ethnic minorities WPR behaviors/concerns/needs. Specifically, evaluation and outreach tools should address the following gaps:

- Limited information across the various generations of ethnic minorities;
- Lack of understanding of how such groups specifically view the term “waste prevention;” and
- Limited participation of ethnic minorities (compared to respondents identifying themselves as White/Caucasian) in large-scale evaluation/customer feedback opportunities, such as phone surveys.

***Recommendation 3:*** Encourage program managers to establish clear program goals and evaluation criteria before implementing WPR programs/projects.

***Recommendation 4:*** Ensure that ethnic minorities have access to a variety of resources and/or communication outlets to allow them to share their opinions and concerns about upcoming changes to solid waste services. Communication strategies should generally involve:

- More direct communication;
- Increasing visual and interactive learning experiences; and
- Accurately translating outreach and education materials.

***Recommendation 5:*** Integrate EJNA’s work more broadly into SPU’s programs. In light of City initiatives such as the Race and Social Justice Initiative (RSJI) and the Zero Waste Initiative (ZWI), it will be critical for the EJNA team’s role within SPU to be clearly defined. This may enable SPU staff organization-wide to understand the type of assistance that EJNA can provide them with in terms of engaging ethnic minorities in WPR programs/services.



## Chapter I: Introduction

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*Seattle Public Utilities (SPU) is seeking to create a new paradigm for how staff and management make decisions. SPU employees routinely ask: Are we providing equitable services across all of our communities? What is the best way we can meet the needs of our customers? What would our customers think about this decision?*<sup>2</sup>

### **A. Background: SPU Embraces New Way of Doing Business**

These types of questions are an integral part of SPU's current decision making process as the primary utility service provider in Seattle. SPU was established in 1997 when the City's Water Department merged with the Solid Waste Utility, the Drainage and Wastewater Utility and the Water Department. Its mission is to

“provide its customers with reliable water, sewer, drainage and solid waste services, and to protect public health, and balance its social and environmental responsibilities to the community while providing cost-effective services to ratepayers.”<sup>3</sup>

To help fulfill this mission, SPU relies on an annual operating budget of about \$600 million, a six-year capital program of about \$1 billion, a workforce of 1,400, and assets totaling about \$4.5 billion.<sup>4</sup>

In 2002, SPU adopted a strategic business plan driven by an **asset management** approach, defined as: “Meeting agreed customer and environmental service levels while minimizing lifecycle costs,” where the term “assets” broadly refers to SPU owned and operated infrastructure such as water, drainage and water, and solid waste systems. Before asset management was adopted, SPU utilized a more traditional, economic model to manage and provide its utility services/programs to the public. But today such a model is not comprehensive enough to address Seattle's utility needs amidst changing demographic, political, social and environmental circumstances.

Therefore, SPU managers and staff are frequently asking what *are* appropriate service levels and **service delivery strategies** to better ensure its utility services/programs “fit” the diverse needs of its customers. Better understanding the needs of its increasingly multicultural citizenry must be a part of this discussion as they are also part of SPU's

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<sup>2</sup> Underground Infrastructure Management Online Newsletter, 2005. *Delivering Core Services: Seattle Mayor Greg Nickels Sticks to the Basics*. Accessed on January 1, 2008 at: <http://uimonline.net/index/webapp-stories-action?id=18&archive=yes&Issue=2005-05-01>

<sup>3</sup> Seattle Public Utilities website, <http://www.ci.seattle.wa.us/util/services/>

<sup>4</sup> Ibid.

customer base. Since SPU, along with other City departments, intends to utilize widespread citizen engagement to achieve its environmental and race and social justice goals (discussed in more detail in section ‘E’ of Introduction) it is crucial for SPU to understand the environmental attitudes, behaviors and concerns of *all* its citizens.

SPU managers and staff are thus continuing to develop and refine its asset management strategy to be intentionally customer-focused. This strategy is important to note here because of its organizational impact—it involves doing business in a way that is driven by customer needs. SPU’s asset management philosophy is specifically focused on:

- Delivery of cost-effective services to customers – today and into the future;
- Making deliberate decisions regarding allocation of resources;
- Transparent decision making fully informed by knowledge of life cycle, **triple bottom line costs (social, economic and environmental) and benefits**; and
- Penetrating nearly every facet of capital and operational resource allocation decision making, including risk management, customer and environmental service levels, trade-offs between capital and operation and maintenance dollars and efficiency in delivery of services, and the tracking and reporting of results.

All components of the SPU’s asset management strategy help to encourage **comprehensive** performance measurement, particularly through a triple bottom line (TBL) reporting process. This enables SPU to clearly evaluate progress towards achieving its mission along economic, environmental *and* social dimensions.

## **B. Research Questions:**

This paper will focus on evaluating SPU’s progress in reaching its “social bottom line” (SBL) goals in the context of waste prevention and recycling (WPR). Achieving SBL goals is defined here as SPU’s efforts to implement **public engagement strategies** that are intentionally inclusive of ethnic minorities (IR) communities as part of its WPR programs/services. Specifically, the purpose of this report is to answer the following research questions:

- 1.) How has SPU engaged racial/ethnic and immigrant communities (hereinafter referred to as “ethnic minorities”) in WPR?
- 2.) What are some barriers to engaging such communities in WPR? What are ways to address barriers?
- 3.) Is SPU’s Environmental Justice Network in Action (EJNA) model (train-the-trainer) an appropriate model to help facilitate the involvement of these communities in WPR? What alternative strategies/approaches focused on WPR, if any, should be considered?

This report includes a review of residential WPR programs/messages encouraged by staff from SPU's Customer Service Branch and its EJNA team.<sup>5</sup> The intended audience for this report is SPU staff, community-based organizations, (CBO) and interested community members.

### **C. SPU Faces Unique Customer Service Challenges**

The Customer Service Branch of SPU's Solid Waste Division (SWD), which includes staff involved in residential and commercial WPR efforts (among other efforts), is finding itself challenged in effectively communicating and delivering its environmental messages to local citizens. This challenge is partially attributed to **Seattle's increasingly diverse population**. Today, about 27% of the city's population identifies themselves as Asian, Hispanic, or black. The city's Asian population has more than tripled since 1970; the Latino and East African communities grew dramatically in the 1990s; and Seattle's African American community currently represents 8.4% of the city's overall population.<sup>6</sup> The city has also experienced a 40 percent increase in its foreign-born population during the decade. In fact, the city's immigrants themselves are quite diverse: among the top ten source countries are the Philippines, Vietnam, Mexico, and China.

But demographic changes alone are not prompting SPU to critically evaluate how it outreaches to ethnic minorities. SPU is also proactively looking at how it views service delivery to these groups due to the City's recent implementation of its **Zero Waste Initiative (ZWI)** and **Race and Social Justice Initiative (RSJI)**. Goals within the RSJI, in particular, are encouraging government agencies to closely examine its public engagement strategies, and whether they effectively attempt to include all citizens – regardless of ethnicity, sex, race, or economic status – in City programs/services. Meanwhile, the City's ZWI objectives, which include a City-wide 60% recycling goal and numerous WPR programs/services, must involve far-reaching citizen engagement in order for it to be successful in the long run.<sup>7</sup> For SPU's SWD staff this means understanding how to increase public participation, especially that of ethnic minorities in its WPR services.

In short, these legislative mandates, combined with demographic, environmental, and organizational changes, are fostering a new vision for how City departments view the distribution of their resources to the public. SPU aims to ensure that its services reach

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<sup>5</sup> See Appendix 1 for SPU organizational chart accessed via SPU Intranet

<sup>6</sup> Seattle Office of the Mayor's website, <http://www.seattle.gov/mayor/issues/rsji/whatIsRSJI.htm>

<sup>7</sup> Seattle Public Utilities website, Accessed on January 3, 2008 at:  
[http://www.pan.ci.seattle.wa.us/util/About\\_SPU/Garbage\\_System/Contracts/SPU01\\_003463.asp](http://www.pan.ci.seattle.wa.us/util/About_SPU/Garbage_System/Contracts/SPU01_003463.asp)

diverse audiences in the most effective way possible, and that equitable distribution of such services is clearly defined. For the purposes of this research service equity means that SPU should ensure that its services/programs are equally distributed in a culturally appropriate manner to all communities across geographic/neighborhood and member-based identity groups, such as the Chinese, Spanish/Mexican community, etc. Equity of access is critical to understand throughout this paper because inequity in access has the potential to distort equity of outcomes. In this context, a potentially inequitable outcome from ethnic minorities' having limited access to environmental information could create a widening knowledge gap between educated whites and less educated non-whites about environmental issues. This, in turn, may result in fewer ethnic minorities desiring to take a place at the decision-making table in terms of sharing their opinions/concerns on environmental issues. Thus, this could potentially create a situation where environmental and science-based public and private institutions, for example, have unequal representation of people from diverse backgrounds and could generate environmental policies less reflective of diverse viewpoints. Further, this means that levels of actual participation of ethnic minorities' in waste prevention and recycling programs/services may not match those of non-ethnic communities.

SPU, however, is uniquely positioned to be a leader in supporting diversity through the work of its EJNA team—SPU staff currently spearheading efforts to engage ethnic minorities. Aside from its core role as a utility service provider to these communities, ENJA plays a “consultant” role to SPU divisions/branches, such as the SWD Customer Service Branch, about how to best reach these groups. Simply put, SPU, through the work of its EJNA team, is reinforcing the message that it sees added value to communities and society at large to involve and empower ethnic minorities via environmental education.

#### ***D. Creation of SPU's Environmental Justice Network in Action***

##### **I. EJNA Beginnings**

The EJNA team, housed in SPU's **Environmental Justice and Social Equity Division**, is a partnership among SPU, local community-based organizations (CBOs) and several public and non-profit agencies.<sup>8</sup> EJNA's formation was driven by the City's desire to improve rate payer equity, address environmental issues and support race and social justice goals.<sup>9</sup> EJNA was formed in 2002 through funding from the Local Hazardous

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<sup>8</sup> See Appendix 1 for SPU organizational chart accessed via SPU Intranet

<sup>9</sup> Seattle Public Utilities website,

[http://www.seattle.gov/util/About\\_SPU/Management/SPU\\_&\\_the\\_Environment/Environmental\\_Justice/index.asp](http://www.seattle.gov/util/About_SPU/Management/SPU_&_the_Environment/Environmental_Justice/index.asp)

Waste Management Program (LHWMP) to identify the key environmental health needs and concerns of within low income, people of color, and IR communities.<sup>10</sup> The EJNA program was a continuation of SPU's 1998 pilot program called the Environmental Justice Pass It On (EJPIO) project, which was funded by a two-year grant from the Environmental Protection Agency. EJPIO was based on **community-led organizing strategies**, which encouraged SPU to utilize pre-existing relationships with local organizations to conduct outreach with ethnic minorities<sup>11</sup>.

Specifically, the program conducted training for community members on how to improve the quality of life for individuals and neighborhoods within the context of indoor air, hazardous household waste, and water and energy conservation issues. The project was targeted at immigrant and refugee (IR) communities located in Southeast Seattle and collaborated with organizations such as the American Lung Association, Seattle Tenants Union, and Community Coalition for Environmental Justice. Due to EJPIO success as a pilot project, EJNA was created as a formalized program within SPU. Unlike EJPIO, however, EJNA addressed long-term sustainability of the program and relied on the following partner roles:

- **SPU:** Administrative lead, project coordination, and management.
- **Agencies / Organizations:** Provide expertise, training, and access to their agency's resources.
- **Community-based organizations (CBOs):** Provide consultation, coordinate, and implement EJNA's work plan activities.
- **Environmental Coalition of South Seattle (ECOSS):** A multi-culturally staffed non-profit contracted to do outreach and education for immigrant and refugee communities, in addition to providing support and expertise to CBOs and LHWMP staff.

## ***II. Working With CBOs and the Train-the-Trainer Approach***

Since the inception of the EJPIO project the EJNA team has utilized a community-based, “train-the-trainer” approach to provide environmental and environmental health information to its target communities. This approach consists of monthly community meetings where city and agency partners conduct presentations to educate and train the CBOs on environmental justice topics.<sup>12</sup> CBO members who sign up – via a

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<sup>10</sup> LHWMP is a partnership that was established in 1991 between local governments and agencies within King County to ensure proper management of hazardous wastes produced by households and, in small quantity, by businesses and other organizations.

<sup>11</sup> See Appendix 2 for EJNA train-the-trainer logic model diagram.

<sup>12</sup> As mentioned earlier in Chapter 1: Introduction, topics covered include: household hazardous waste, recycling, air and water quality, seafood safety, energy conservation, and non-toxic household cleaning products.

memorandum of agreement (MOA) or “contract” – and complete EJNA training sessions are given a stipend of about \$10,000 for their participation to conduct outreach education to the community it serves.

As stated in its work plan<sup>13</sup>, which is approved by the EJNA team, each CBO has flexibility in choosing a mixture of presentations, festivals, and field trips. Since one of EJNA's funders is LHWMP, household hazardous waste education is a required theme in at least one presentation and for all festivals. All other topics are covered based on what each community needs and SPU priorities – 2008 was about emergency preparedness and 2009 will likely continue to cover this topic as well as WPR. CBO members are the lead educators at festivals and depending on the CBO's staff familiarity with the topic, they either are the lead educators or co-facilitators at presentations. For unfamiliarity of topics, agency partners are the lead educators.

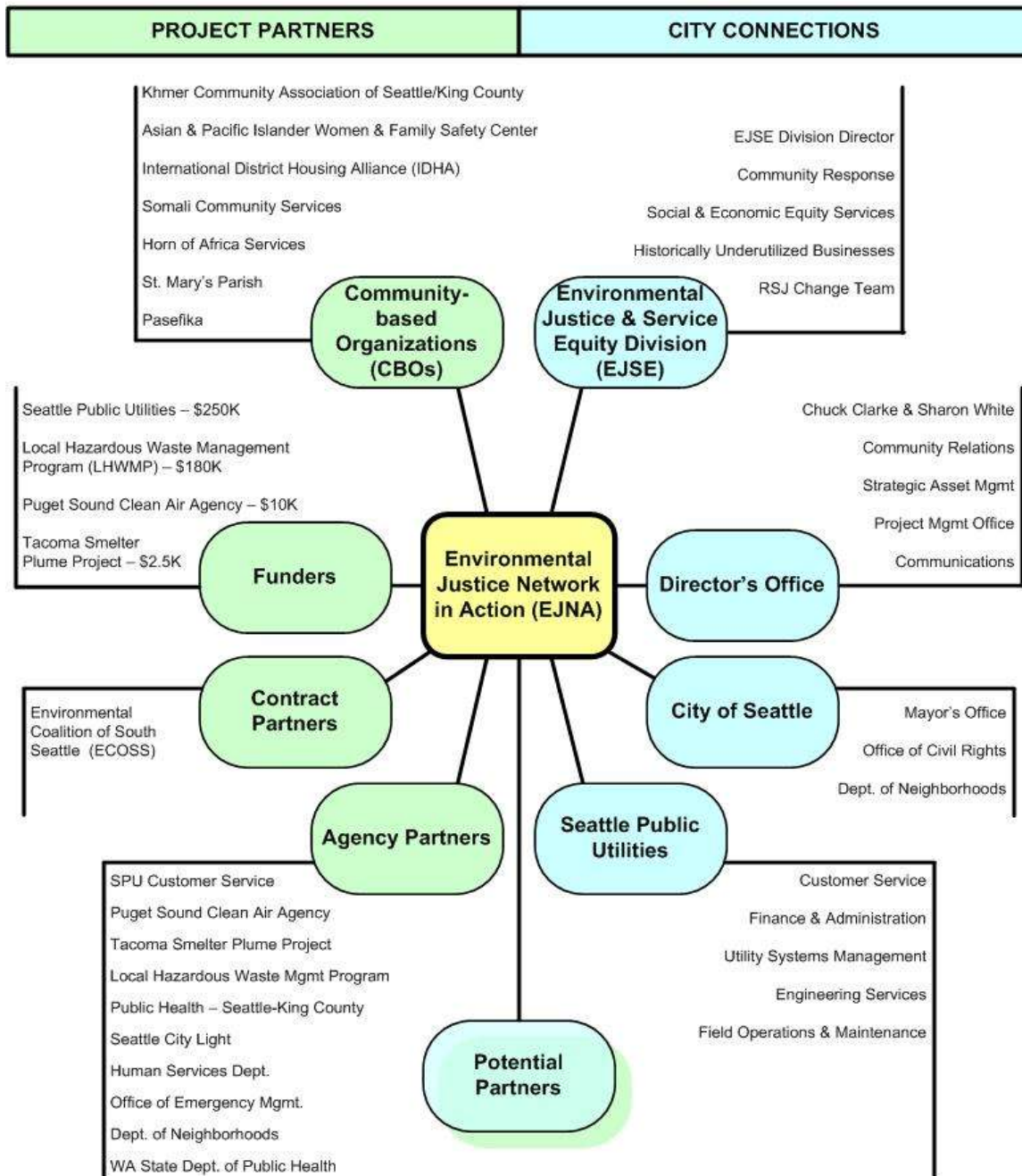
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<sup>13</sup> See Appendix 3 for a sample of a CBO workplan from 2008.

**Figure 1: EJNA serves as the key mechanism for outreaching to ethnic minorities**  
**Environmental Justice Network in Action (EJNA)**

2008 Connections

Updated 5/12/08



Through the help of multiple partners – which have grown from 1 in 2002 to 7 in 2008 – EJNA is able to more effectively educate and outreach to ethnic minorities compared to SPU staff solely relying on delivering City environmental educational materials in translated forms. It is also important to point out that EJNA's goals dovetail those found

in the City's RSJI and its ZWI. Both initiatives, combined with EJNA's goals, encourage further engagement of diverse communities in City services/programs. In fact, with the implementation of the RSJI City departments are now accountable via legislative mandate to ensure that the needs of such communities are appropriately addressed.

## **E. RSJI**

### **I. RSJI Overview**

In 2004, Seattle Mayor Greg Nickels announced the Race and Social Justice Initiative (RSJI), coordinated by the Seattle Office of Civil Rights (SOCR) to:<sup>14</sup>

- Create a community where residents and employees experience our cultural and ethnic diversity as an asset;
- Eliminate institutional attitudes, practices, and policies that result in racial disproportionality; and
- Understand the challenges that cultural pluralism places on democracy and **transform our civic and citizen engagement processes** to address those challenges.

All City departments are responsible for integrating the RSJI concerns listed above into "RSJI Strategic Work plans" that are appropriate to their lines of business. At this juncture, plans have been submitted and reviewed by SOCR, and departments are moving forward with plan revisions and implementations. The overall goal is that plans become embedded into City government operations in the long-term, and that they emphasize equitable distribution of resources by using race and social justice as a standard for good business practice and government action.

### **II. SPU's RSJ Work Plan**

To meet the City's RSJI mandate, SPU developed and adopted an RSJI Strategic Plan outlining its strategies for addressing racial and social equity as a utility service provider.<sup>15</sup> SPU's most recent plan, from 2007-2008, is broken down into the following categories and corresponding tasks:<sup>16</sup>

- **Capacity Building:** Focuses on City employees being introduced to the RSJI and gaining a common understanding of institutionalized racism. About 1400 SPU

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<sup>14</sup> Seattle Office of the Mayor's website, Accessed 4/10/08 at <http://www.seattle.gov/mayor/issues/rsji/whatIsRSJI.htm>

<sup>15</sup> See Appendix 4 for SPU's RSJ strategic plan.

<sup>16</sup> Accessed on 4/6/08 at SPU Intranet web site at: <http://spuweb/rsj/default.htm>



staff members have received RSJ training, which is intended to address and educate staff about this important issue.

- **Economic Equity:** Concerned with SPU's ability to be inclusive of underrepresented business communities.
- **Public Engagement:** Focuses on ensuring that SPU's public engagement processes are intentionally multicultural. Currently EJNA is partnering with its CBOs to give input on communication tools and use the Eco Village model to educate residents on select topics at local festivals.
- **Workforce Equity:** Aimed at ensuring that SPU's workforce is representative of the City's diversity across all levels and functions. SPU managers and leaders are committed to eliminating institutional racism from SPU's programs, policies and procedures.
- **Immigrant and Refugee Access to Services:** Concerned with improving the availability of translation and interpretation during the delivery of SPU services.

SPU must not only align its utility service delivery efforts with RSJI workplan tasks, it must also be cognizant of specific ZWI goals if it is to achieve increased and sustained involvement of ethnic minorities in its WPR program. Additionally, ZWI goals rest on the continued support of the RSJI and EJNA in order to move forward.

## **F. ZWI**

In 2006, the City of Seattle adopted the ZWI—a progressive environmental agenda based on ambitious waste reduction and environmental stewardship goals. The ZWI is based on resolution 30990, and sets up lofty targets for recycling and waste prevention. For example, Seattle aims to redirect **60% of garbage destined for landfills to recycling plants by 2012 and 70% by 2025.**<sup>17</sup> Also, encouraged in part by ZWI goals, SPU's Solid Waste Division has approved of **new solid waste contracts**, which include **expanded recycling and food waste services** for SPU customers in 2009.<sup>18</sup> The intent of these new contracts is to help decrease the City's carbon footprint, enhance environmental sustainability, and provide new services for Seattle residents and businesses. To be successful in these areas while meeting RSJI, ZWI and asset

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<sup>17</sup> Seattle City Council web page, Accessed 1/22/08 at <http://www.seattle.gov/council/conlin/miw.htm>

<sup>18</sup> Seattle Public Utilities website, Accessed 1/5/08 through 5/31/08 at [http://www.pan.ci.seattle.wa.us/util/About\\_SPU/Garbage\\_System/Contracts/SPU01\\_003463.asp](http://www.pan.ci.seattle.wa.us/util/About_SPU/Garbage_System/Contracts/SPU01_003463.asp)

management goals, SPU must take proactive measures to engage all of Seattle's communities.

## **G.      *Organization of this Report***

Chapter two describes the **research methodology** to complete project goals aimed at understanding SPU's support of ethnic minorities in WPR; this research process was primarily driven by reviewing SPU internal documents and, if available, Internet-based literature on WPR programs targeting these groups, as well as semi-structured interviews with SPU, CBOs and other non-profit organization staff.

Chapter three provides information on the **local context**, which includes descriptions of the environmental justice framework, demographic information on Seattle's ethnic minorities, and SPU-encouraged WPR programs/services by topic.

Chapter four identifies **key findings and analysis** from over 20 interviews and from reviewing literature and other documents to highlight SPU's efforts to support ethnic minorities in WPR. The chapter also includes interview findings to evaluate EJNA's train-the-trainer model as the primary outreach method for delivering SPU environmental messages to ethnic minorities.

Chapter five contains my **recommendations** to SPU for how to further support ethnic minorities its WPR programs/services, especially in light of new solid waste service changes.

## **Chapter II: Research Methods**

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### ***A. Overview***

In order to evaluate SPU's efforts in supporting the involvement of ethnic minorities its WPR services/programs, I needed to understand the local context currently driving SPU's work in these environmental efforts. Thus, my research focused on assessing SPU's WPR work that involves engagement of ethnic minorities through the "lens" of the EJNA team's work as well the City's RSJI and its ZWI, the latter of which has encouraged new solid waste contract changes. These initiatives and changes are concerned with Seattle's increasingly diverse population and the economic, social and environmental benefits associated with further engaging them in City environmental (and other) programs; they have also prompted Seattle City government to improve its understanding of how to increase involvement of these communities in such programs too achieve its environmental goals. To help facilitate SPU's evaluation process, my research involved identifying *how* SPU – primarily through the work of the EJNA team – has specifically supported ethnic minorities' involvement in its WPR efforts since the inception of the RSJ and ZWI initiatives. In light of my findings, I came up with recommendations for SPU staff to make more informed decisions on how to outreach and educate to these groups about its residential WPR services/programs.

### ***B. Research Methods***

Research methodology was based on: 1) literature reviews, 2) review and collection of quantitative and qualitative data from SPU Surveys and other relevant reports, such as focus group studies, needs assessments and student research papers, and 3) interviews of internal (SPU) and external stakeholders (CBOs and non-profit organizations).

#### **1. Literature Review**

The internet and literature review for this research consists of three phases: 1.) drawing from Internet-based information about the RSJI and ZWI, 2.) examining other cities' WPR programs, and 3.) assessing the EJNA team's train-the-trainer model as a means to engage ethnic minorities in government resources, and alternative outreach approaches to achieve community engagement goals—particularly targeted at reaching the needs of diverse populations in WPR. The purpose of the literature review is to identify best practices that could be used by SPU and to place their existing WPR work into a broader context by comparing it to similarly-related work of local jurisdictions.

## 2. Review of SPU Documents

Qualitative and quantitative data to support my research was based on SPU's existing information. Information reviewed was drawn from a number of public and in-house resources: SPU's Residential Customer Satisfaction Surveys (RCSS), focus group studies, needs assessments, and research projects. Where possible, I collectively used these resources to provide understanding of ethnic minorities', awareness levels and perceptions of City WPR programs and policies. The majority of resources that I used were jointly developed by SPU staff and private consultants. All resources were completed between 2002 and 2007.

## 3. Interviews with Stakeholders

Semi-structured interviews with stakeholders that work within and outside of the city allowed me to clarify definitions of key terms pertinent to my overarching research question. Significant terms that I clarified in the process are: *successes* and *barriers* (i.e., in terms of SPU's engagement of ethnic minorities in WPR). The alignment of SPU staff and CBO opinions and views of barriers were also evaluated as part of this process.

Additionally, interview questions<sup>19</sup> attempted to clarify what does/doesn't make the EJNA's team's train-the-trainer model an appropriate model for engaging ethnic minorities in WPR by drawing from opinions of individuals that fall into the following two interviewee categories: 1.) SPU/other City staff working on City WPR efforts and/or are involved in RSJ efforts and 2.) local CBOs and non-profit organizations that directly outreach to ethnic minorities to educate and inform them about SPU's WPR (and other) policies, programs and other resources. Interviewees were also given the opportunity to offer suggestions about alternative approaches to the EJNA team's train-the-trainer model.

Overall, the goal of interview questions was to learn about what opinions and attitudes various stakeholders held about SPU's efforts to engage these groups in WPR and how SPU could improve its service delivery strategies to increase their participation in WPR. In total, 21 interviews were conducted which each took approximately 30 minutes to an hour to complete.<sup>20</sup>

### Interviewees:

**SPU Staff:** Interviews were conducted with several SPU staff members identified by EJNA and SWD program leads and interviewees as helpful resources due to their

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<sup>19</sup> See Appendix 5 for a list of interview questions. Not all questions were asked of each interviewee. Specific questions asked depended on interviewee's position and role.

<sup>20</sup> See Appendix 6 for a list of interviewees.

involvement with SPU's WPR programs and/or engagement of ethnic minorities. Interviews with SPU staff included supervisors and program managers from the following groups within SPU:

- *Customer Service Branch, Administration*
- *Solid Waste Contracts*
- *Resource Conservation*
- *Environmental Partnerships Division*
- *Environmental Justice Network in Action Team*
- *Director's Office*

**Local CBOs and other Non-Profit Groups:** Interviews in this category were conducted with Seattle CBOs identified by the ENJA staff as key "leads" in directly educating ethnic minorities, in coordination with EJNA, about various environmental issues. Interviews were completed with supervisors and program managers representing the following CBOs:

- ***International District Housing Alliance (IDHA):*** a non-profit organization committed to improving the quality of life for International District residents and Asian and Pacific Islanders of greater Seattle. IDHA provides low-income housing, homeownership education and counseling, financial literacy, tutoring and support, job skills and related services<sup>21</sup>.
- ***St. Mary's Church:*** The overall objective of church staff is to support parishioners to succeed in all their endeavors. However, St. Mary's also actively engages staff and the local community – comprised of Latino, Filipino, Japanese, Italian, African American, Caucasian members – in topics related to the environment, women's rights, social justice, and immigration as these topics are of interest to its community, and St. Mary's seeks to play an active role in unifying communities not only through religion but through information that may improve the well-being of its members.
- ***ECOSS:*** an independent environmental resource organization promoting sustainable economic development and a safer, healthier, cleaner environment in Puget Sound. Through education and outreach, ECOSS helps businesses and individual residents - many of whom are not native English-speakers - prevent pollution, conserve energy, manage hazardous materials and clean up contaminated properties.<sup>22</sup>

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<sup>21</sup> International District Housing Alliance website, Accessed 5/2/05 at <http://www.idhousingalliance.org/>

<sup>22</sup> Environmental Coalition of South Seattle website, Accessed on 5/2/08 <http://ecoss.org/about/index.htm>

#### **4. Analysis**

This paper also includes an analysis of findings from literature review, SPU internal documents, and interviews. Specifically, findings about engagement/evaluation tools, models (such as EJNA team’s train-the-trainer model), and particularly strategies identified by the majority of interviewees as “successes” are analyzed based on its strengths and weaknesses to:

- Capture WPR-related attitudes/opinions/concerns of ethnic minorities and/or engage them in WPR;
- Address barriers identified by Seattle city staff/other city staff and CBOs (representative of ethnic minority groups).

Findings that discuss barriers are assessed in terms of whether there is alignment with what SPU and CBOs view as barrier(s) to ethnic minorities’ engagement in City services/programs, such as those related to WPR. This research used feedback from CBOs (based on 2008 Eco Village Training Session specifically covering WPR—described in more detail in Chapter 4) as a representative sample of ethnic minorities’ opinions/attitudes/needs in the context of WPR barriers.

## Chapter III: Local Context

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### *A. Overview*

Through interview and literature findings it was clear that SPU should continue to deliver its services in culturally appropriate ways to meet the needs of its increasingly diverse citizenry. This will help it to achieve its TBL and ZWI goals, the latter of which supports new solid waste contract changes, starting in 2009, that promote increased food composting, recycling and other WPR services. With SPU's solid waste contract changes calling for widespread public compliance with new WPR services<sup>23</sup> it will thus be critical for SPU to understand WPR attitudes, behaviors and levels of awareness of all its customers—especially those of ethnic minorities as they are generally less likely to be engaged in environmental activities compared to community members who are middle-class white homeowners, for example.

Therefore, to begin understanding the needs of Seattle's ethnic minorities, this chapter defines the framework of environmental justice (EJ) as a broad "lens" for which to view service/social equity (hereinafter referred to as "utility equity"). Utility equity means that SPU should ensure that its services/programs are culturally relevant to all communities across geographic locations like Seattle neighborhoods and member-based identity groups, such as the Chinese, Spanish/Mexican community, etc. This Chapter also pulls in demographic data and SPU's existing and new (i.e., those starting in 2009) WPR-encouraged behaviors to bring the current local context back into focus.

### *B. Environmental Justice Framework and Defining Utility Equity*

Before it can be said exactly what utility equity is in the context of SPU's services/programs, it is important to understand how utility equity falls into the broader EJ framework as this is the guiding foundation for the EJNA team's work, which is now "layered" with multiple city initiatives such as the RSJI and the ZWI that, together, call for more inclusive citizen engagement processes to achieve the City's goal of higher waste diversion rates.

#### **I. What is environmental justice?**

According to the Environmental Protection Agency, EJ "is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income

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<sup>23</sup> SPU website with different services.

with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”<sup>24</sup>

EJ had emerged as part of the community-driven Environmental Justice Movement in the early 1980s to bring visibility to the general public about the inequitable environmental burden born by groups such as racial/ethnic minorities, women, or residents of developing nations.<sup>25</sup> However, not until the passing of Executive Order (EO) 12898 in February of 1994 did public institutions become accountable for addressing EJ issues. The President of the United States issued Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, calling all federal agencies to:

*“...make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.”*<sup>26</sup>

Due to the EO 12898, among continued efforts by community organizers and other EJ advocates, there was heightened public awareness about EJ. But more importantly, the EO helped raise visibility of EJ as an ethical message by emphasizing that all persons are entitled to healthy communities and government is obligated to ensure them these rights. Local government, for instance, can do this by making sure that its services and other resources are accessible to *all* citizens with its respective jurisdictions, and that the public is not disproportionally or unequally impacted by environmental harms. Specific examples of EJ issues, as highlighted by SPU’s EJNA team include the following:

**Example 1:** Chronic exposure to toxic household cleaning products causes asthma in a person, which can then potentially limit the person’s working capacity, thus limiting labor choices and income levels. In addition, poor minority children may be at highest comparative risk because they tend to be both more exposed and more susceptible than the general population.<sup>27</sup> Moreover, this highlights that minority households with children

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<sup>24</sup> U.S. EPA website, Accessed 2/16/08 at: <http://www.epa.gov/compliance/environmentaljustice/>

<sup>25</sup> Wikipedia website, Accessed 3/12/08 at: [http://en.wikipedia.org/wiki/Environmental\\_justice](http://en.wikipedia.org/wiki/Environmental_justice)

<sup>26</sup> The U.S. Department of Housing and Urban Development. Accessed May 18, 2007. *Environmental Justice*, Executive Order 12898, [www.hud.gov/offices/fheo/FHLaws/EXO12898.cfm](http://www.hud.gov/offices/fheo/FHLaws/EXO12898.cfm)

<sup>27</sup> Environmental Health Perspectives website, Accessed on 6/11/08 at: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1392242>



may have more frequent exposure to such products compared to non-minority households with no children.

**Example 2:** An area with high crime affects the community's and each person's overall safety raises risks of harm and causes mental stress, thus reducing the quality of life or those living in that area.

The EJNA team attempts to tackle the issues raised in the examples above, among others, via a partnership and community-driven network approach.<sup>28</sup> This approach revolves around a culture that encourages all partners involved – SPU, other agencies, CBOs, and other non-profit organizations – to exchange information and services and to develop meaningful relationships for a variety of projects. CBOs (bulleted below) are particularly

- Khmer Community Association of Seattle/King County
- Asian and Pacific Islander Women and Family Safety
- International District Housing Alliance
- Somali Community Services
- Horn of Africa Services
- St. Mary's Parish
- Pasefika

instrumental to the EJNA team's success as they are typically trusted by community members to deliver environmental (and other) messages. All project partners have input on the EJNA's program direction through evaluation mechanisms such as stakeholder analyses which help determine program improvements and direction. This helps the EJNA team determine *how* to best communicate with ethnic minorities and which environmental topics communities find to be most important. Since the EJNA team is housed within SPU, environmental education topics, such as recycling, are always covered, regardless of whether these communities have identified it as a priority. Additionally, as the overarching rationale behind the EJNA team's work, EJ is always integrated into all of the environmental messages that EJNA/CBOs deliver to ethnic minorities. The train-the-trainer model is a good example of EJ at work because it seeks to not only educate community members about environmental topics but it also empowers them to be environmental stewards in their neighborhoods.

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<sup>28</sup> See Figure 1 on page X for EJNA 2008 Connections Chart

## **I. Why is EJ relevant to “utility equity?”**

Further, EJ is relevant to the discussion of utility equity because it is the foundation for the EJNA team’s work, which is gaining public and SPU staff visibility due to the RSJI and SPU’s TBL reporting process. As noted by many interviewees, EJNA, RSJI and TBL accounting are also supported at the executive-level; thus, reflecting SPU’s upper management “buy-in” and organizational capacity to proactively address EJ issues. The EJNA team’s work, guided by EJ principles, underscores the importance of ensuring that ethnic minorities are not disproportionately impacted by environmental burdens. This is something most interviewees felt was unique to how SPU is engaging diverse communities.

Although the RSJI and SPU’s TBL reporting system were not implemented to specifically address EJ issues, many EJ advocates would likely argue that the “social” component of the RSJI and TBL reporting *is* naturally related to environmental concerns because the external environment is one of the key indicators that help to measure an individual/community’s quality of life—the broader issue that is important here. In fact, it is well-established that the social, environmental, economic, and political conditions under which people live are profound determinants of their health.<sup>29</sup> Further, EJ advocates would likely argue that all individuals have the right to clean air, water, and land. . Since part of SPU’s mission entails “protecting public health, and balancing its social and environmental responsibilities to the community while providing cost-effective services to ratepayers” it is clear that EJ is critical to the topic of utility equity.<sup>30</sup> Specifically, based on input from interviewees, below are common themes about the EJ/RSJ inequities in utility services/programs/projects:

### **Issue #1: Lack of Culturally Relevant Resources Means Limited Access**

Utility resources that are not tailored to address the needs of the diverse audiences it is intended to reach may create accessibility issues across geographic boundaries, racial/ethnic communities, socio-economic, etc. Many interviewees felt that diverse communities, especially low-income ethnic and IR groups, already experience difficulties in accessing government services because they are unfamiliar with how government operates, or simply face economic, social, political, and other barriers which prevent them from taking advantage of government services and other resources.

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<sup>29</sup> Center for Health and Social Inequalities Research at Portland State University, Accessed 3/12/08 at <http://www.sociology.pdx.edu/CHSIR/index.php>

<sup>30</sup> SPU website, <http://www.ci.seattle.wa.us/util/services>

**Issue #2: Consequences of environmental inequities exacerbate negative conditions in poor and minority communities.**

It has been widely noted throughout environmental justice literature that marginalized populations have faced inequities for decades. In fact, many studies suggest clear relationships between a high concentration of minority populations, or low average incomes, with an unhealthy environment.<sup>31</sup> For example, a low-income community primarily comprised of ethnic minorities may be targeted for the placement of a new solid waste facility, which may already be facing environmental health issues since it is nearby an industrial facility that emits toxic chemicals, for example. Capital improvement project decisions about the location of solid waste facilities are a common public utility-related EJ/RSJ issue that was noted by many interviewees and highlighted in the literature.

**Issue 3: Ethnic minorities are not consistently represented at the decision-making table.**

Although SPU is recognized by many interviewees as a leader in engaging RSJ communities in its services – particularly through the public engagement work of EJNA – minorities are still not adequately represented at the decision making table. Instead, as mentioned by many interviewees, those most often involved in public engagement opportunities are white, middle to upper class homeowners. With Seattle’s population increasingly becoming multicultural it will be important for SPU to address ways to encourage more diverse public participation.<sup>32</sup> Through the RSJI, a key step in this process, the City has acknowledged its commitment to positively adapting to this diversity in an action-oriented way.

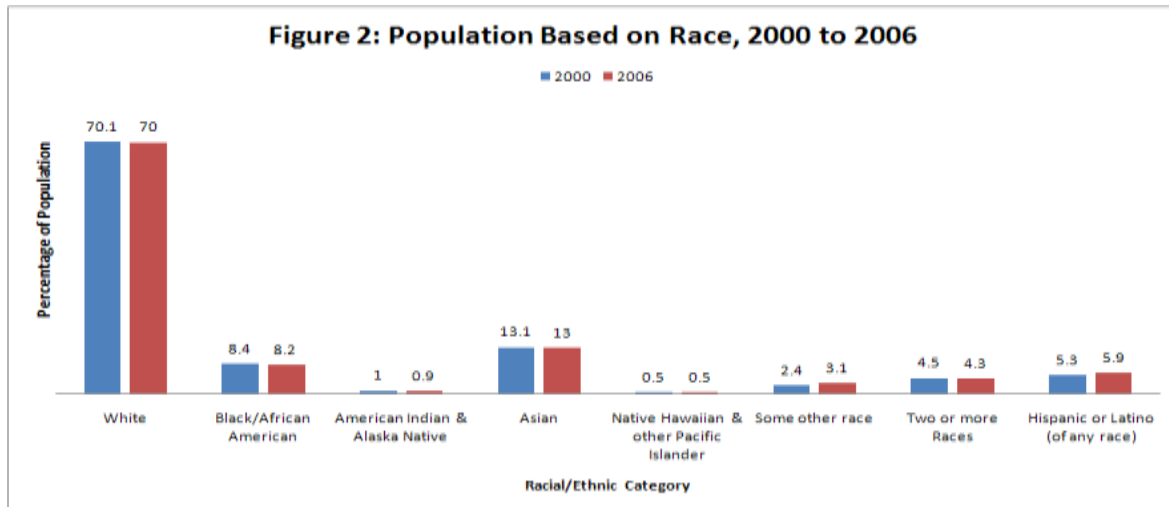
***C. Seattle’s Ethnic Minorities***

Further, the City’s RSJI helps raise an important message: the City needs to be responsive to its employees and *all* the communities it serves, regardless of race, social, economic, and other backgrounds. But knowing how to reach communities in the best way possible is no easy task. SPU and other City departments are significantly challenged in their responsibility to reach diverse groups with its services/programs because Seattle is becoming increasingly comprised of a multicultural citizenry.

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<sup>31</sup>Electronic Green Journal (2004). Irwin Weintraub. Fighting Environmental Racism: A Selected Annotated Bibliography. Accessed 3/12/08 at <http://www.mapcruzin.com/EI/ejigc.html>

<sup>32</sup> Seattle Department of Planning, Accessed 2/18/08 at [http://www.seattle.gov/humanservices/community\\_development/conplan/plan/CP\\_2005\\_Community\\_Profile\\_Demographic\\_Trends\\_X.pdf](http://www.seattle.gov/humanservices/community_development/conplan/plan/CP_2005_Community_Profile_Demographic_Trends_X.pdf)



As reflected in **Figure 2**, the percentage changes in population based on race from 2000 to 2006 indicate that Seattle residents identifying themselves as “some other race” or as “Hispanic or Latino” are increasing compared to those who identify themselves as “white.”<sup>33</sup> This suggests that Seattle is experiencing what is happening nationally, in terms of demographic trends: increasing diversity and increasing Hispanic/Latino populations.<sup>34</sup> Meanwhile, compared to American Community Survey (ACS) data from 2000, ACS data from 2006 reflects a decline in the percentage of the population identifying themselves as white. Again, suggesting that Seattle is becoming more diverse.

Further, according to 2006 ACS data, about 19% of Seattle’s population (~115,460 people) was born abroad.<sup>35</sup> This figure equates to an increase of about 20,508 foreign-born persons in Seattle compared to ACS data of Seattle’s foreign-born recorded in 2000, which was 16.9%. For example, Figure 3 below shows an increasing trend (except for foreign-born from Oceania) in persons reporting they were from Europe, Asia, Africa, and Latin America. The top sending countries are (in order from most to least): Philippines, Vietnam, China, Mexico, Korea, Japan, Ethiopia, Germany, United Kingdom, Cambodia, Laos, India, Thailand, and Russia – these countries account for 66,000 of the 95,000 foreign-born population in Seattle in the year 2000.<sup>36</sup>

<sup>33</sup> American Fact Finder web site, Accessed on 6/5/08 at:

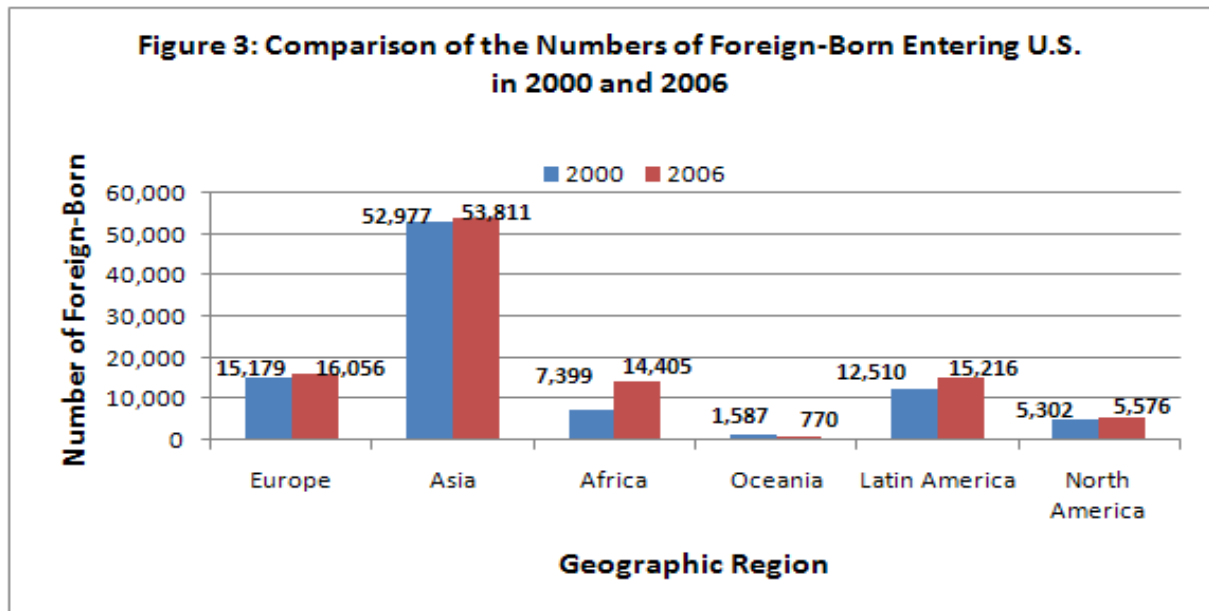
[http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)

**Note:** This web site includes survey information where Hispanics can be of any race. Figures for all races except white can include Hispanics and people of multiple races.

<sup>34</sup> Cohen, Aubrey. Seattle PI. 8/9/07: *Diversity Grows as King County Sees More Minorities*. Accessed on 6/5/08 at [http://seattlepi.nwsource.com/local/326928\\_census09.html](http://seattlepi.nwsource.com/local/326928_census09.html)

<sup>35</sup> Ibid.

<sup>36</sup> 2000 ACS and Census Bureau data are the most recently available on Seattle demographics; 2006 ACS data are *estimates* projected from 2000 Census.



#### ***D. Language***

Along with increasing racial/ethnic and IR diversity there is substantial diversity in the number of languages spoken by Seattle residents. For example, in the Rainer Valley – located in Southeast Seattle largely comprised of high numbers of minorities – 44.6 percent of residents who have lived in the area for over five years speak a language other than English at home.<sup>37</sup> Besides English, the primary languages spoken at home include Spanish, Chinese, Vietnamese, and Tagalog. With the variety of languages used by Seattle residents, public engagement efforts become more challenging for local governments to address because this means they must make attempts to understand a myriad of cultural backgrounds as part of its service delivery process. For example, tailoring WPR messages to be culturally relevant to Seattle’s diverse citizens may not be effectively done via translations alone – knowing the perceptions, attitude, and levels of awareness of racial/ethnic and IR groups is also important.

#### ***E. SPU-encouraged WPR Activities***

For the purpose of this evaluation WPR activities are defined as SPU-promoted programs/services that are related to any of the following topics:

- Yard waste disposal

<sup>37</sup> Rainer Valley Community Development Fund. *Socio-economic Profile of Rainer Valley* (2003). Accessed 2/18/08 at <http://www.rvcdf.org/docs/RainierValleyProfile.pdf>

- Food composting/organics
- Reduce, reuse and exchange
- Household hazardous waste disposal and reduction
- Residential recycling
- Electronics disposal

Discussion of these topics will be fleshed out in more detail in Chapter 4, which highlights how SPU – through the work of the EJNA team – is educating ethnic minorities about WPR.

## Chapter IV: Findings and Analysis

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Before delving into recommendations about how SPU can further engage ethnic minorities in its WPR efforts, this chapter describes *how* SPU has supported the involvement of these communities in such efforts through various education and outreach “tools.” The second section of this chapter describes barriers to engaging these groups in city-initiated WPR programs/services and other resources as well as ways to address these barriers. Finally, the third section of this chapter discusses whether the EJNA team’s direct outreach and education model – focused on “train-the-trainer” strategies – is an appropriate model for engaging these populations, and includes potential approaches the EJNA model could incorporate that are focused on delivering WPR messages to ethnic minority audiences.

As mentioned in Chapter Two, this report describes SPU’s engagement ethnic minorities in WPR activities based on a two-part information gathering process: 1.) review of SPU internal documents and through 2.) semi-structured interviews with SPU staff, CBOs and other nonprofits. This chapter weaves information together from both sources to highlight overall findings that address the following research questions:

- 1.) How has SPU engaged ethnic minorities in City-funded WPR programs/services?
- 2.) What are some barriers in engaging such communities in WPR programs? What are ways to address these barriers?
- 3.) Is SPU’s EJNA (train-the-trainer) model an appropriate model to help facilitate the involvement of these communities? What alternative strategies, if any, should be considered?

Findings, categorized by research question, are based on the most common themes that arose from interviews and/or literature review. Findings are also primarily discussed in the context of the EJNA team’s work since they are SPU staff directly tasked with engaging ethnic communities. Also, not all findings are specific to WPR, yet they are included because interviewees felt they were important to engaging ethnic minorities overall.

***This chapter provides findings and analysis by the following five sections:***

- A.) SPU’s Engagement of Ethnic Minorities in WPR Efforts
- B.) Barriers to Engaging Ethnic Minorities in WPR Efforts
- C.) EJNA Model Evaluation and Potential Alternatives

## A. SPU's Engagement of Ethnic Minorities in WPR Efforts

### **Research Question 1:**

How has SPU supported the involvement of ethnic minorities in its WPR efforts?

***Finding # 1:** SPU, through its EJNA team, has primarily encouraged ethnic minorities to participate in WPR behaviors by providing them with direct education and outreach about WPR. In fact, the majority of those interviewed highlighted the EJNA team's work as an SPU "success" in supporting ethnic minorities by providing them with hands-on education and training about WPR. Common themes about why they felt EJNA was successful in this respect included the EJNA team's ability to:*

- **Reach marginalized communities "where they are" with environmental messages.** Many interviewees acknowledged this as extremely important based on their previous experience/knowledge from working with these groups. Meeting communities where they are refers to delivering messages in community spaces, such as churches, community centers, schools, etc. In other words, interviewees think effective communication with these communities ought to take place where it is most convenient for communities to access government services as access can often times be a barrier to participation.
- **Build trust and establish meaningful relationships with communities.** Most interviewees said that through the EJNA team's train-the-trainer model the EJNA team is able to more effectively communicate and partner with community leaders who are usually trusted sources of information within their respective communities. Some interviewees also said that government in general should not underestimate the value of building trust with communities as this is key to helping them further engage in government programs/services.
- **Embrace other outreach/education strategies other than translation.** Although most interviewees said language is the number one barrier to engaging ethnic minorities in WPR, overall, they also feel translating outreach/educational materials was not enough—this needs to be coupled with direct outreach because such communities are usually more receptive to this kind of communication.

***Finding #2:** SPU has also involved ethnic minorities in its WPR "research" efforts through phone surveys, focus groups, and direct outreach and education (see Table 1 below). Direct outreach and education is largely carried out by the EJNA team, which also conducts focus groups/surveys with these populations to understand its*



environmental and environmental health needs. SPU uses these evaluation tools to assess these groups WPR-related attitudes/opinions/needs and to educate them about WPR behaviors that SPU encourages. Most surveys and focus group reports that are not produced by the EJNA team focus on white/Caucasian participants; thus, may not be accurately reflective of ethnic minorities WPR opinions and attitudes. However, SPU is hoping that surveys, such as SPU's Residential Customer Service Survey (RCSS), may support increased participation of ethnic minorities because the survey is now offered in more languages.

**TABLE 1: Snapshot of SPU's evaluation tools and direct outreach and educational model for understanding ethnic minorities WPR-related attitudes/opinions/needs**

<b>Evaluation Tools</b>	<b>Barrier/(s) Tool Intends to Address</b>	<b>Does Tool Support Engagement Of Ethnic minorities In WPR? (Some Examples)</b>	<b>Racial/Ethnic Categories Represented and Total Participation (based on example to left)</b>
<b>Phone surveys</b>	<ul style="list-style-type: none"> <li>Language</li> <li>Lack of knowledge of ethnic groups' WPR-related awareness levels</li> </ul>	<ul style="list-style-type: none"> <li>2007 SPU Residential Customer Service Survey is a phone-administered survey. It is now conducted in two additional non-English languages: Vietnamese and Cantonese (until 2007 Spanish was the only non-English language for the survey). Some questions related to WPR topics but intended to reflect general public's opinion.</li> </ul>	<ul style="list-style-type: none"> <li>Spanish/Hispanic/Latino</li> <li>Asian</li> <li>Black/African American</li> <li>American Indian/Alaskan Native</li> <li>Pacific Islander/Native Hawaiian</li> <li>Other Race</li> <li>White/Caucasian</li> <li>Total number of participants: 1,267</li> <li>1,207 in English, 30 in Spanish and 30 in specific Asian languages.</li> </ul>
<b>Focus group studies</b>	<ul style="list-style-type: none"> <li>Access</li> <li>Lack of knowledge of ethnic groups' WPR-related awareness levels</li> </ul>	<ul style="list-style-type: none"> <li>Focus group studies, such as 2006 SPU Focus Group Report: <i>Attitudes Towards Solid Waste Service in the City of Seattle</i>,<sup>38</sup> are targeted at understanding ethnic minorities opinions of current and potential City SWD services, which include WPR.</li> </ul>	<ul style="list-style-type: none"> <li>African American</li> <li>Chinese</li> <li>East African</li> <li>Latino</li> <li>Vietnamese</li> <li>Total focus group participants: 55</li> </ul>
<b>EJNA direct outreach and education model</b>	<ul style="list-style-type: none"> <li>Language</li> <li>Ethnic Minorities Lack of Trust with Government</li> <li>Access</li> </ul>	<ul style="list-style-type: none"> <li>Interactive-based outreach model—includes trainings such as 2008 Eco Village training at St. Mary's Church, which allows EJNA team to deliver WPR messages to community through direct outreach.</li> </ul>	<ul style="list-style-type: none"> <li>Total of 23 participants</li> <li>Number of CBOs represented: 7</li> </ul>

Interviewees had mentioned at least one or more of the evaluation and/or outreach tools listed above as the primary way(s) in which SPU engages ethnic minorities WPR (and other environmental topics).

<sup>38</sup> Seattle Public Utilities Focus Group Report: Attitudes Toward Solid Waste Service in the City of Seattle, June 2006.

***Finding #3:*** Additionally, SPU provides translation services of WPR outreach and education materials so that ethnic minorities with non-English speaking needs can be engaged in the City's WPR messages. For example, SPU provides a yes/no recycling flier about what you can and can't recycle in Seattle recycling containers, which is available in 7 different languages in addition to English:

- Cambodian
- Chinese
- Korean
- Russian
- Spanish
- Thai
- Vietnamese

SPU also offers monthly newsletters in multiple languages to encourage awareness and education about WPR (and other environmental topics) among diverse populations. However, due to SPU's limited resources and program priorities, the distribution and/or requests for these WPR outreach and education materials are not typically tracked on a consistent basis.

***Finding #4:*** SPU's implementation of its RSJ Staff Training is another example of SPU's efforts to support ethnic minorities (in general) as it helps to build cultural competency of staff so that they are hopefully better able communicate with these groups about WPR and other issues. Specifically, RSJ training is intended to provide staff (includes SPU managers, supervisors, and executives) with a summary of the origins and history of the concept of "race" in the United States, and how our institutions and society have been shaped by our race-based beliefs. About 1400 SPU staff participated in the training, which was led by SPU-staff volunteers. Although not a direct outreach tool for communities and not explicitly intended to teach staff how to engage marginalized populations in WPR efforts, it is included as a key finding here because at least half of SPU staff interviewed feel the training was an important way to help staff improve and/or understand how historical marginalization of certain populations may have contributed to them being less inclined to take part in government programs/services. In fact, some staff said that the RSJ training helps to raise much needed awareness or "cultural competency" about *why* ethnic minorities' unique needs and concerns ought to be recognized, and that they appreciated SPU taking a proactive role in addressing them.

***Finding #5:*** Since the EJNA team's inception, which includes involvement of CBOs and various other partners, they have mainly educated ethnic minorities about waste prevention as part of an overarching message that is related to specific environmental

topics like “recycling” and “household hazardous waste.”<sup>39</sup> Specifically, the EJNA team has educated these communities about WPR via a series of messages/topics which include:

- What you can/can’t recycle
- Product stewardship
- Benefits of recycling and reuse
- Food waste collection
- Electronics disposal
- Purchasing products with less packaging

Again, it is important to note that the EJNA team’s work is also focused on educating ethnic minorities about other environmental health topics such as: organics, indoor air, water quality, energy and water conservation, using non/less toxic products and proper disposal of HHW, public safety, etc. But its focus changes according to the changing priorities of communities and SPU; 2008 and 2009 will be devoted to WPR education, for example.

***Finding #6:*** *The EJNA team has partnered with agencies and CBOs to educate ethnic minorities in WPR (and other environmental and environmental health topics) by conducting community presentations (often led by CBOs) at festivals/fairs, conferences, field trips, and tours. Based on EJNA’s team’s 2006 Annual Report, it was able to achieve the following results:*<sup>40</sup>

- Reached approximately 176 people through presentations, field trips, and group presentations;
- Reached about 1025 people through festivals;
- Potentially reached an additional 871 people through family member connections (calculated through household size listed on reporting forms)

Some of the events/activities which have included WPR messages are described in Table 2 on the following page:

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<sup>39</sup> 2004-2005 EJNA needs assessment.

<sup>40</sup> EJNA 2006 Annual Report. SPU Internal Document.

**TABLE 2: EJNA outreach events and activities that include WPR education**<sup>41</sup>

Event/Activity	Description	Intended Outcomes
<b>Eco Village Training and Outreach</b>	SPU teams with CBOs to train them on delivering environmental messages to community members. CBOs then educate festival attendees about what they can do in their home and in their community to protect their health and the health of their family and community and save resources.	<ul style="list-style-type: none"> <li>Understand ways to have a healthy home, yard, and community.</li> <li>Topics covered include: emergency preparedness, water conservation, energy conservation, healthy food/safe food, indoor air, natural yard care, WPR, clean air, and climate protection.</li> </ul>
<b>Tour of South Transfer Station</b>	Tour of Seattle's garbage, recycling and household hazardous waste facilities	<ul style="list-style-type: none"> <li>Understand what happens to our garbage and recycling materials</li> <li>How this links to clean air, water and use of natural resources.</li> </ul>
<b>Field trip to reuse store</b>	Tour of store where community members can pick up earth friendly household items for free	<ul style="list-style-type: none"> <li>Proper label reading to make a more informed selection of household products</li> </ul>

***Finding #7:** Recent SPU RCSS and EJNA focus group data may reflect that ethnic minorities are generally interested and knowledgeable about recycling; however, there is a lack of data on waste prevention attitudes and behaviors of these groups overall. However, examples of WPR information that have been captured are noted below:*

**TABLE 3: Ethnic minorities' knowledge/interest levels about recycling**

Evaluation Tools	Recycling Question Asked in Survey/Focus Group	Key Findings:
<b>SPU Residential Customer Service Survey</b>	<ul style="list-style-type: none"> <li>Are you aware of City's new recycling requirements that took affect on January 1, 2005?</li> </ul>	<ul style="list-style-type: none"> <li>Majority of respondents within each ethnic category said they were aware of the City's recycling ban.<sup>42</sup></li> </ul>
<b>EJNA 2006 Annual Report</b> <sup>43</sup>	<ul style="list-style-type: none"> <li>Are you aware of the City's new ban on placing recyclables in trash?</li> <li>Have you seen recycling yes/no flier?</li> <li>Do you own a recycling cart/dumpster?</li> <li>Do you use a recycling cart/dumpster?</li> </ul>	<ul style="list-style-type: none"> <li>72% know about the recycling ban</li> <li>72% have seen recycling Yes/No flier</li> <li>94% have a recycling cart or dumpster</li> <li>83% use a recycling cart or dumpster</li> </ul>
<b>2006 SPU Focus Group Report: Attitudes Towards Solid Waste Services in the City of Seattle</b>	Preference for recyclables collected among the following options: <ul style="list-style-type: none"> <li>No change</li> <li>Electronics added</li> <li>Textiles added</li> <li>Motor oil added</li> <li>Plastic bags not allowed</li> <li>Glass not allowed</li> </ul>	<ul style="list-style-type: none"> <li>Across all focus groups except the Chinese, there was a general demand for electronics recycling.</li> <li>African Americans and East Africans were most willing to pay for the additional service due to issues related to illegal dumping in their neighborhood.</li> </ul>

<sup>41</sup> EJNA 2006 Annual Report. SPU Internal document.

<sup>42</sup> 2007 City of Seattle Residential Customer Service Survey.

<sup>43</sup> Ibid.

### **Analysis of Overall Findings for Research Question 1:**

SPU has engaged ethnic minorities in surveys, focus groups and direct outreach (which includes conducting surveys/focus groups) and education efforts to better understand their WPR-related attitudes/opinions/needs; however, no single evaluation and/or outreach tool described in this research provides extensive qualitative and/or quantitative data on WPR-specific opinions, attitudes and behaviors of ethnic minorities across time. Despite this, SPU, through the work of its EJNA team, may be helping to narrow the gap between more informed whites and less informed non-whites (i.e., ethnic minorities). As opposed to simply distributing translated materials, SPU is allowing ethnic minorities to engage in various, culturally appropriate environmental learning opportunities. This is largely achieved through the EJNA team's direct outreach and education model.

Meanwhile, the RCSS captures some WPR information but it is largely representative of the opinions of survey respondents who identified themselves as "White/Caucasian," thus it may not be appropriate to use this tool to understand ethnic minorities' WPR-related attitudes/behaviors. Additionally, this survey is limited in gathering feedback from ethnic minorities because it is only available in two other languages aside from English. The survey is also limited to those with land-line phone services. Meanwhile, the EJNA team's model of direct outreach and evaluation can be viewed as complementary to the some indirect evaluation tools SPU uses because it seeks the input of those likely to be excluded from more traditional evaluation processes, such as surveys conducted via phone. Also, the EJNA model offers ethnic minorities interactive and visual-based public engagement opportunities, such as festivals, presentations, tours, etc. This is more "culturally-relevant" way of involving these communities because, as reflected in EJNA needs assessments<sup>44</sup>, they are typically more visual and hands-on learners.

However, like the RCSS, the EJNA team's work is also limited in its capacity to research and evaluate the WPR-related attitudes/opinions/needs of these communities. Overall, since EJNA's inception, ethnic minorities have been interested in non-WPR topics.<sup>45</sup> Although finding 7 reflects these communities may have an interest/awareness of the City's recycling policies/programs, WPR in general is not a priority issue/concern for any of these communities. In fact, some interviewees noted that many of the ethnic communities they have/currently work with already practice WPR behaviors; thus, such groups may not feel the need to be "taught" a new way (i.e., the City's way) to engage in them. Also, based on EJNA surveys, other issues such as public safety have been frequently identified as the number one issue for these groups, which was further

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<sup>44</sup> EJNA Needs Assessment 2001-2002 and 2003-2004. Accessed 3/18 at SPU website.  
[http://www.seattle.gov/util/About\\_SPU/Management/SPU & the Environment/Environmental Justice/index.asp](http://www.seattle.gov/util/About_SPU/Management/SPU_%20the_Environment/Environmental_Justice/index.asp)

<sup>45</sup> Ibid.

highlighted by interviewees.<sup>46</sup> Despite SPU's efforts to engage ethnic minorities in WPR it is also important to recognize that these communities may simply choose not to engage in the City's WPR programs/services because they have other priorities. But it is important that SPU continue to understand these groups' WPR-related attitudes/opinions/needs through its existing evaluation and outreach tools so that appropriate communication/outreach strategies can be developed. Thus, understanding some barriers to having ethnic minorities participate in WPR will be critical. Section B attempts to discuss some of these barriers and also offers ways to address them.

### ***B.) Barriers to Engaging Ethnic Communities in WPR Efforts and Ways to Address Barriers***

#### **Research Question 2:**

What are some barriers to engaging ethnic minorities in WPR? What are ways to address these barriers?

***Finding #8:*** *SPU staff identified language, culture, ethnic minorities' lack of interest in WPR/environmental issues, and SPU's limited knowledge about ethnic minorities WPR-related attitudes and behaviors as main barriers to these individuals' participation in WPR. Frequently mentioned barriers by interviewees include:*

- **Language.** Not all utility customers clearly speak English as their first language, and certainly not all utility staff speak multiple languages and/or have a translator available at their convenience; thus, most staff identified this (along with cultural issues) as the main barrier to engaging racial/ethnic communities because communication simply becomes challenging.
- **Cultural Relevance.** Environmental terms such as “waste prevention,” “recycling,” and “food composting,” may be viewed differently/unheard of among people from various cultural backgrounds, so it is important to develop culturally appropriate communication/outreach materials. Pictures and other visuals associated with these terms should also be representative of target audiences in order for them to be able to relate to/understand them.

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<sup>46</sup> Ibid.

- **Ethnic Minorities Lack of Interest in WPR/Environmental Issues.** About half of interviewees felt that these communities are generally not interested in WPR other environmental issues because often times they have other priorities/challenges. For example, some may work multiple jobs and have difficulty in sustaining a steady income. Moreover, for those who fall into this category it is common for them to feel limited motivation to change/alter their behavior to support an environmental service/program.
- **SPU Has Limited Knowledge Of Ethnic Minorities' WPR-related Behavior.** Overall, interviewees felt that they had limited knowledge of how to best communication/outreach to these communities in general, let alone in ways that specifically promote their understanding of WPR.

**Finding #9:** *The majority of interviewees said that increasing access of government resources and making sure such resources are culturally relevant to target audiences are the best ways to address some of the barriers mentioned in Finding #8. There is alignment with SPU-identified barriers and those of ethnic minorities when comparing SPU's opinions to those shared by ethnic minorities who provided feedback at 2008 Eco Village training session.<sup>47</sup> This suggests that, among those interviewed, there is awareness about some of the general barriers that may prevent these groups from taking part in WPR efforts.*

**Finding #10:** *Similar to SPU staff interviewed in this research, ethnic minorities said there were various barriers which go beyond language that prevent them from engaging in WPR efforts.<sup>48</sup> The EJNA team's most extensive list of WPR barriers and ways to address them are identified in Table 4 by CBOs (representing ethnic minorities' opinions/concerns) participating in EJNA's 2008 Eco Village Training:<sup>49</sup>*

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<sup>47</sup> See Table 2 on page 30 for description of EcoVillage Training.

<sup>48</sup> Ethnic minorities WPR opinions/concerns are represented via CBO feedback from 2008 Eco Village Training.

<sup>49</sup> ECO village feedback assessment where CBO input is used to reflect ethnic minorities' opinions.

**TABLE 4: Community-identified WPR barriers and methods/messages to address barriers<sup>50</sup> might want to take a last look at capitalization of table titles**

Barriers	Methods/Messages to Address Barriers
Language	<ul style="list-style-type: none"> <li>▪ Translate materials</li> <li>▪ Ensure materials are correctly translated</li> <li>▪ Have people who do outreach speak the language</li> </ul>
Literacy	<ul style="list-style-type: none"> <li>▪ Visuals and symbols</li> <li>▪ Videos</li> <li>▪ Discussions</li> </ul>
Lack of awareness/knowledge	<ul style="list-style-type: none"> <li>▪ More outreach (preferably direct)</li> </ul>
Recycling rules are confusing	<ul style="list-style-type: none"> <li>▪ In-depth training for CBO staff so they can better explain WPR messages to community</li> </ul>
Lack of interest	<ul style="list-style-type: none"> <li>▪ Educate on why people should want to recycle and reuse</li> <li>▪ Save the earth/environment for future generations</li> <li>▪ Fees and fines for not recycling</li> <li>▪ Demonstrations, such as bio-diesel for making paper</li> <li>▪ Samples of items made from recycled materials</li> <li>▪ Provide cost-saving incentives</li> </ul>
Apartments – no infrastructure, no containers for sort and carry out of recycling	<ul style="list-style-type: none"> <li>▪ SPU can raffle off small recycling bins to use for in-home use during festivals, presentations and other outreach events</li> </ul>
Size of carts and dumpster lids – heavy and hard for seniors to manage	<ul style="list-style-type: none"> <li>▪ SPU should work with apartment managers and elderly tenants to determine appropriate carts/lids</li> </ul>
People who don't live in Seattle limits, and may not have recycling available <sup>51</sup>	<ul style="list-style-type: none"> <li>▪ Reuse and waste prevention (saves money)</li> </ul>

### **Analysis of Overall Findings for Research Question 2:**

Overall, interviewees feel they know little about ethnic minorities WPR-related behaviors/attitudes/opinions. Instead, most felt more comfortable with sharing general barriers, such as access to government resources, which these groups are often face when engaging in government programs/services and other resources. Nonetheless, the barriers that SPU identified were largely aligned with barriers identified by CBOs who participated in Eco Village feedback session on WPR educational messages.<sup>52</sup> For example, both SPU staff and CBOs agreed that barriers to having ethnic minorities participate in WPR are due to language, culture, and lack of interest in WPR-related issues. These barriers are currently being addressed by SPU through translation services of WPR educational/informational materials, as well as through the EJNA team's direct education and outreach at festivals, tours, conferences, etc. It is also important to note that the EJNA team's feedback session/focus group report following the Eco Village

<sup>50</sup> Ibid.

<sup>51</sup> Note: EJNA also serves underserved communities outside of Seattle due to LHWMP funding.

<sup>52</sup> See Table 4 "Community-identified WPR Barriers and Methods/Messages to Address Barriers" on page 35.



training provided useful information on ethnic minorities' WPR-specific barriers—the most extensive to date since EJNA's inception. This highlights that the EJNA team's direct outreach and education approach can serve as a useful tool to capture – via detailed feedback reports – ethnic minorities' WPR-related behaviors/attitudes/opinions. But unlike the RCSS evaluation process, this particular evaluation method occurs with small groups that may only be representative of ethnic minorities targeted by CBOs and, thus, may not necessarily be reflective of the opinions/needs of Seattle's ethnic minorities on a more broad scale.

### ***C.) Evaluating the EJNA Model and Potential Alternatives***

#### **Research Question 3:**

Is the EJNA Model an Appropriate Model to facilitate the general engagement of ethnic minorities? If not, are there alternative models?

***Finding #11:*** *An overwhelming majority of interviewees felt that the EJNA team's train-the-trainer model to engage ethnic minorities was an appropriate model to facilitate the involvement of these communities in environmental and environmental health issues. Frequent responses about what they felt were strengths of the model include its capacity to:*

- Build trust between government actors and ethnic minorities.
- Leverage limited SPU resources to deliver environmental messages by utilizing existing network of CBOs who are already “connected” and trusted by the community.
- Offer “train-the-trainer” education to CBO members—approximately 80 ethnic community members have been trained by the EJNA team and its partners<sup>53</sup>.
- Go beyond translating printed outreach materials.
- Meet communities “where they are.”
- Promote culturally-relevant education and outreach.

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<sup>53</sup> Data highlighted in email correspondence with Michael Davis, program manager for EJNA.

***Finding #12:*** *Most interviewees had no specific alternative “model” to suggest as an alternative to the EJNA’s team’s train-the-trainer model; instead, most felt the EJNA team’s model could be modified in various ways to improve its effectiveness in reaching racial/ethnic and IR groups. Some common themes about how the model could be modified include:*

- Having increased youth involvement by partnering with schools to deliver environmental messages.
- Emphasize outcome (vs. output) driven performance measurement to better assess whether the EJNA team’s train-the-trainer direct outreach and education model is truly effective in educating ethnic minorities about environmental health issues and/or encouraging behavior change.
- Hiring more EJNA staff within SPU since it is likely that the EJNA team’s services/assistance will increase in demand amongst community members and within SPU, especially with RSJI and the ZWI now implemented.
- Incorporating social marketing strategies and/or partnering with others who are already engaged in outreach and education work with ethnic minorities.

### **Analysis of Overall Findings for Research Question 3:**

#### **I. Evaluation of EJNA’s Train-the-Trainer Model**

As reflected in interviewee comments, the EJNA team is doing a “good job” by recognizing that a “one-size-fits-all” approach to educating ethnic minorities about WPR programs/service and other resources is not the answer; instead, tailoring messages in culturally appropriate ways – based on community input – is critical to engaging these populations. EJNA, since its inception, has collected information on how to best communicate and outreach to these communities in general, which can be applied to WPR-specific messaging. More recently, for example, the EJNA team – through its Eco Village feedback training follow-up – has developed a preliminary list of community-identified barriers and ways to address barriers (see page 33, Section B). This can serve as a starting point for which SPU can determine how to effectively communicate WPR messages to ethnic minorities.

But it is also important to note that the EJNA team’s work is limited in its reach because it is likely to serve ethnic minorities targeted by CBOs within its partnership/networking structure. The EJNA team is always open to new partnership-building opportunities yet lack of budgetary and staff resources have prevented substantial program expansion. Nonetheless, particularly in light of the RSJI, TBL reporting, and the ZWI, the EJNA team remains optimistic that there will be opportunity for growth in the future.

In short, the train-the-trainer model isn't the only way that SPU can further involve such communities in its WPR programs and services (as well as environmental education in general—EJNA's main focus). Other approaches can be adopted, which are further discussed below.

## **II. Potential Alternatives: Looking at WPR Programs in Other Cities**

Based on literature review, there was lack of information available on City-initiated WPR programs that explicitly addressed how to successfully engage ethnic minorities—most WPR programs focused on broad public engagement strategies. It was also challenging to find information on outreach/education strategies that increased the WPR-related behaviors of ethnic communities and, as a result of such strategies, contributed to increased rates of materials recycled (e.g., via percentage of materials collected per month). However, one of the case studies discussed below (El Monte's Bilingual Recycling Program), highlights how its key outreach strategy of multilingual on-site technical assistance to Spanish-speaking helped to increase the percentage of materials of materials recycled in multifamily units in the area. Again, as discussed throughout this research, the importance of targeted education and outreach cannot be underestimated.

Specifically, the case studies (see Table 4 on page 36) compiled by the CWIMB, are relevant to this research because they offer targeted approaches to engaging ethnic minorities in WPR. Criteria for selection of program/outreach strategy below are based on its ability to: 1.) Engage ethnic minorities in WPR and 2.) Address barriers similar to those identified by SPU/other City Staff and CBOs (representative of ethnic minorities). Collectively, CIWMB's assessment of WPR programs in the cities of El Monte, San Francisco, and Monterey incorporate one or more of the following approaches to engage ethnic minorities in WPR:<sup>54</sup>

- Multilingual on-site technical assistance
- Bilingual outreach and education materials
- Neighborhood recycling campaigns
- Recycling grants
- Culturally relevant pictures
- Trilingual hotline
- Recycling task force
- Public Service Announcements (PSAs), radio ads in English and Spanish

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<sup>54</sup> California Integrated Waste Management Board web site,

The strategies above that involve using culturally relevant pictures, bilingual outreach and education materials, a trilingual hotline, and multilingual on-site technical assistance may best support ethnic minorities' involvement in WPR because all directly tackle language issues—one of the main barriers identified by interviewees and CBOs. As discussed in Section B, barriers to engagement also included issues related to literacy and culture which are tied to language; thus, appropriate mediums of communication need to incorporate these concerns as well. SPU's application of any the approaches mentioned above will likely entail increased staff and budgetary resources and a continued understanding of how to communicate with ethnic minorities about WPR. Thus, if SPU decides to consider any of these strategies, it may be more appropriate for it to adopt the least resource intensive strategy in the short-term.

**TABLE 5: City WPR programs targeted at ethnic minorities<sup>55</sup>**

Program	Program Characteristics		
	Main Barrier to Participation	Key Outreach Strategies	Benefits/Results
<b>El Monte Multi-lingual Multi-family Outreach Program, CA</b>	<p><b>Language</b> gap between building managers and multifamily unit tenants:</p> <ul style="list-style-type: none"> <li>Almost 58,000 speak Spanish, and more than 10,000 residents speak Asian languages</li> <li>Spanish and Asian languages were dominant languages spoken by managers</li> </ul>	<ul style="list-style-type: none"> <li><b>Multilingual on-site technical assistance</b> to businesses, multifamily units, and nonprofit organizations</li> <li><b>Bilingual Outreach and Education Materials</b> - brochures, posters, PSAs, and videos on recycling-related issues (business recycling, paper recycling, and household hazardous waste)</li> </ul>	<ul style="list-style-type: none"> <li>Addressed language gap between Spanish-speaking tenants and business owners.</li> <li>Increased % of materials recycled in multifamily units</li> <li>Reached all of community's 34 mobile home parks 450/475 of its condominium units.</li> </ul>
<b>San Francisco's Zero Waste Recycling Program, CA</b>	<p><b>Language</b> – Over 40% of City's population speaks a language other than English, and more than 20% do not speak English well</p>	<ul style="list-style-type: none"> <li><b>2 neighborhood recycling campaigns</b> per year – consists of direct mail, phone banking, ads in local papers, presentations, posters, and street signs)</li> <li><b>\$1,000 to \$2,000 grants</b> for youth organizations focused on increasing recycling in their neighborhood.</li> <li>Use of <b>culturally-relevant pictures</b> on recycling outreach materials</li> <li><b>Trilingual hotline</b> that plays recycling and source reduction messages in English, Cantonese, and Spanish.</li> </ul>	<ul style="list-style-type: none"> <li>Multilingual outreach staff members personally contact 30,000 households per year with their WPR message.</li> <li>Promotes youth engagement in WPR</li> <li>Photos on outreach materials allow residents to see, very clearly, what items are acceptable to place in their recycling bins.</li> <li>Addresses diverse population's communication needs via variety of media</li> </ul>
<b>Monterey Park's Recycling Program, CA</b>	<p><b>Language and Culture</b> – variety of languages spoken besides English, such as Spanish and Chinese and 81% of population is of Asian, Pacific Islander, or Hispanic origin</p>	<ul style="list-style-type: none"> <li><b>Trilingual outreach</b> – via recycling brochures and displays</li> <li>Contributed funds towards <b>PSAs and radio ads in English and Spanish</b> (produced by Los Angeles County).</li> <li><b>Recycling Task Force (RTF)</b>, comprised of community members and established by City</li> </ul>	<ul style="list-style-type: none"> <li>Addresses diverse community's communication needs via variety of media</li> <li>Leverages limited City resources for recycling education by utilizing community members part of RTF</li> </ul>

<sup>55</sup> California Integrated Waste Management Board web site, <http://www.ciwmb.ca.gov/>

## Chapter V: Recommendations and Conclusion

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The following recommendations to SPU are based on findings and analysis from Chapter 4. The broad set of recommendations below are included to serve as an initial guide for SPU as it continues in its communications and outreach planning process to further support the engagement of ethnic minorities in its utility programs/services. Specifically, SPU should consider the following immediate and future steps as ways to help improve its communication with ethnic communities about its upcoming solid waste service changes and achieve its RSJ work plan, ZWI and TBL reporting goals related to ethnic minority engagement and social/service equity.

**1. *Tailor messages about WPR on existing SPU outreach and education materials that discuss these topics so that they are culturally relevant to target audiences.***

SPU can reference Chapter 4 (see Table 4 on page 37) of this report – which highlights WPR barriers identified by community-based organizations and the ways in which SPU can address these barriers – as a starting point for determining what specific materials/communication strategies can be feasibly modified in the short and long-term. The recycling yes/no flier, for example, is already widely distributed to various communities and generally well-received; however, based on input from CBOs, it needs to be accurately translated and include pictures that reflect items purchased/disposed by various ethnic communities.

**2. *Allocate more resources to researching ethnic minorities WPR behaviors/concerns/needs.*** Based on review of SPU’s internal documents, there are gaps in understanding how to best reach these groups with effective WPR messages due to:

- Limited information across the various generations of ethnic minorities;
- Lack of understanding of how such groups specifically view the term “waste prevention;” and
- Limited participation of ethnic minorities (compared to respondents identifying themselves as White/Caucasian) in large-scale evaluation/customer feedback opportunities, such as phone surveys.

Moreover, depending on staff and budgetary resources, existing and future evaluation tools should be modified with these “gaps” in mind to improve information gathering on ethnic minorities opinions and needs. SPU should attempt to further expand its understanding of such groups in this context by also looking at ways to engage ethnic minorities not traditionally reached within EJNA’s networking structure.

3. ***Encourage program managers to establish program goals and evaluation criteria before implementing WPR programs/projects.*** Many interviewees noted that ethnic minority participation (i.e., reflected via demographic data, requests for translated materials, etc.) in WPR programs is not readily available because program evaluation has not focused on these groups' engagement in such programs until more recently. Nonetheless, program evaluation remains challenging because program managers are often times preoccupied with managing the ongoing activities of a project. Also, some interviewees mentioned that interpreting program "results" and how to address them (if necessary) is also difficult. Moreover, SPU may want to consider offering staff training about how to utilize existing and future evaluation results from various resources. This will hopefully enable staff to be more effective in using SPU surveys, focus group data, and other evaluation tools to do more strategic decision-making about program planning/design/implementation, especially as it relates to increasing involvement of ethnic minorities in WPR.
4. ***Ensure that ethnic minorities have access to a variety of resources and/or communication outlets to allow them to share their opinions and concerns about upcoming changes to solid waste services.*** Lack of access to government resources was the most dominant theme echoed by interviewees, thus suggesting that SPU's primary use of disseminating public information via the Internet may not necessarily be the most effective way to communicate WPR messages to meet diverse audience needs. SPU can attempt to address access issues that ethnic minorities face by considering communication strategies that are most appropriate for these groups. These strategies should aim to involve:
- More direct communication;
  - Increasing visual and interactive learning experiences; and
  - Appropriately translated outreach and education materials.
5. ***Integrate EJNA's work more broadly into SPU's programs.*** In light of the RSJI and SPU's TBL reporting goals, it will be important for the EJNA team's role within SPU to be clearly defined. This will hopefully enable SPU staff organization-wide to understand the type of assistance that EJNA can provide them with in terms of engaging ethnic minorities in WPR programs/services as well as others. This may involve:
- Developing a strategic communications plan that outlines EJNA's information-sharing process with SPU staff, managers, and CBOs;
  - Where appropriate, establishing clear goals and outcomes for engaging ethnic minorities in WPR programs and services; and
  - Potentially increasing SPU staffing and budgetary resources towards EJNA team.

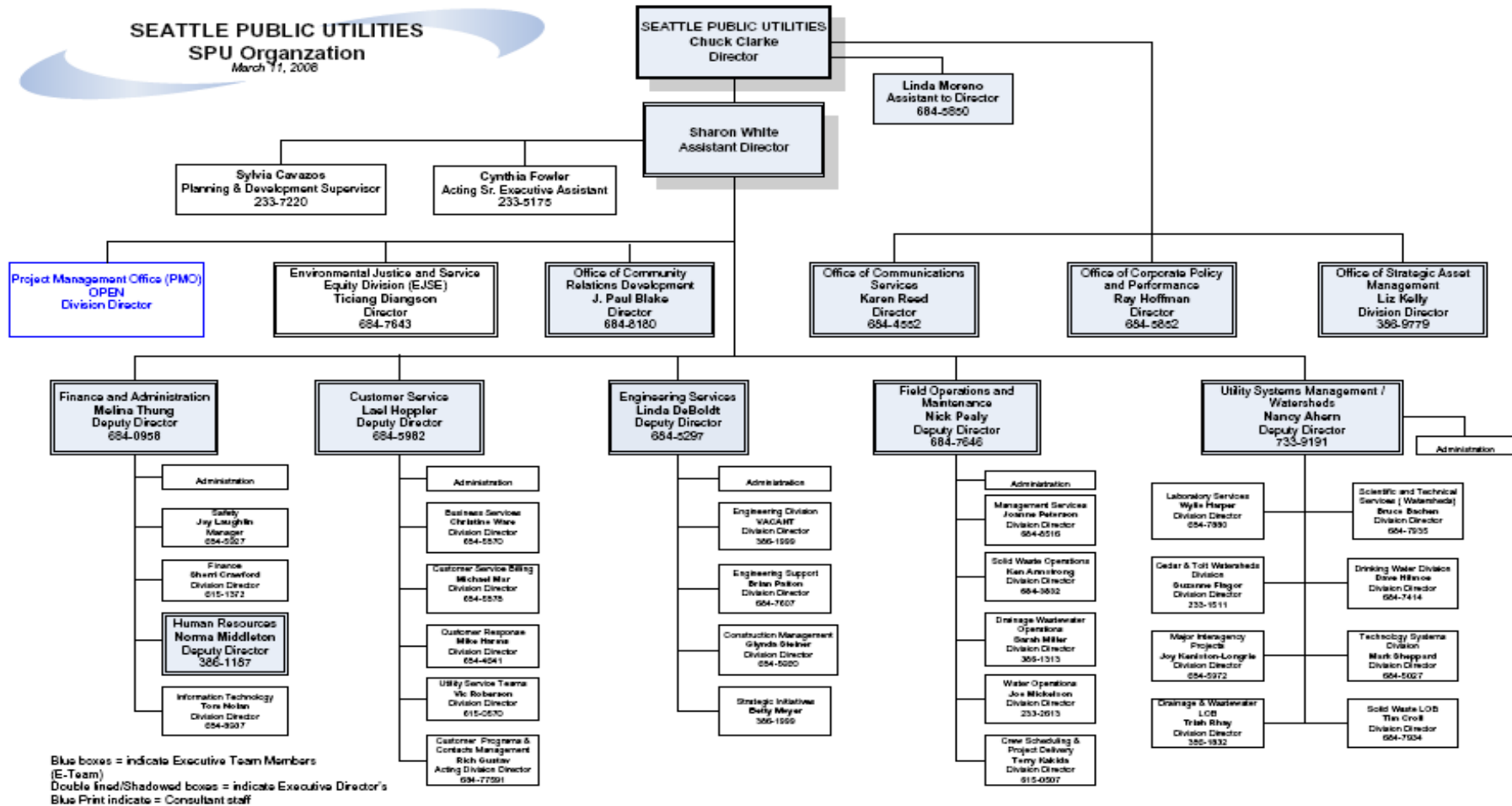
## ***Conclusion***

In short, having diverse members of the public seek SPU as a resource for its utility needs, environmental education, and other related information is not as easy as managers and staff would hope. For an immigrant recently coming to this country who does not speak English and/or is unfamiliar with how local government operates, barriers to engaging in City programs and services are often wide-ranging. Language is commonly identified barrier, for example, but it is certainly not the only issue.

Moreover, City departments should strive to go beyond the translation of education and outreach materials. Although this strategy is aimed at better engaging non-English speaking populations it falls short of effectively communicating environmental messages to diverse audiences. SPU has recognized the need to reach its diverse customer base through other outreach mechanisms, and this is particularly reflected through the work of the EJNA team. Therefore, SPU should continue to capitalize on the EJNA team's success. By drawing from the EJNA team's expertise and considering ways to build on it – through promoting performance measurement and evaluation at the outset of program/project planning, for example – SPU may be well positioned to effectively deliver its programs and services to ethnic minorities now and into the future.



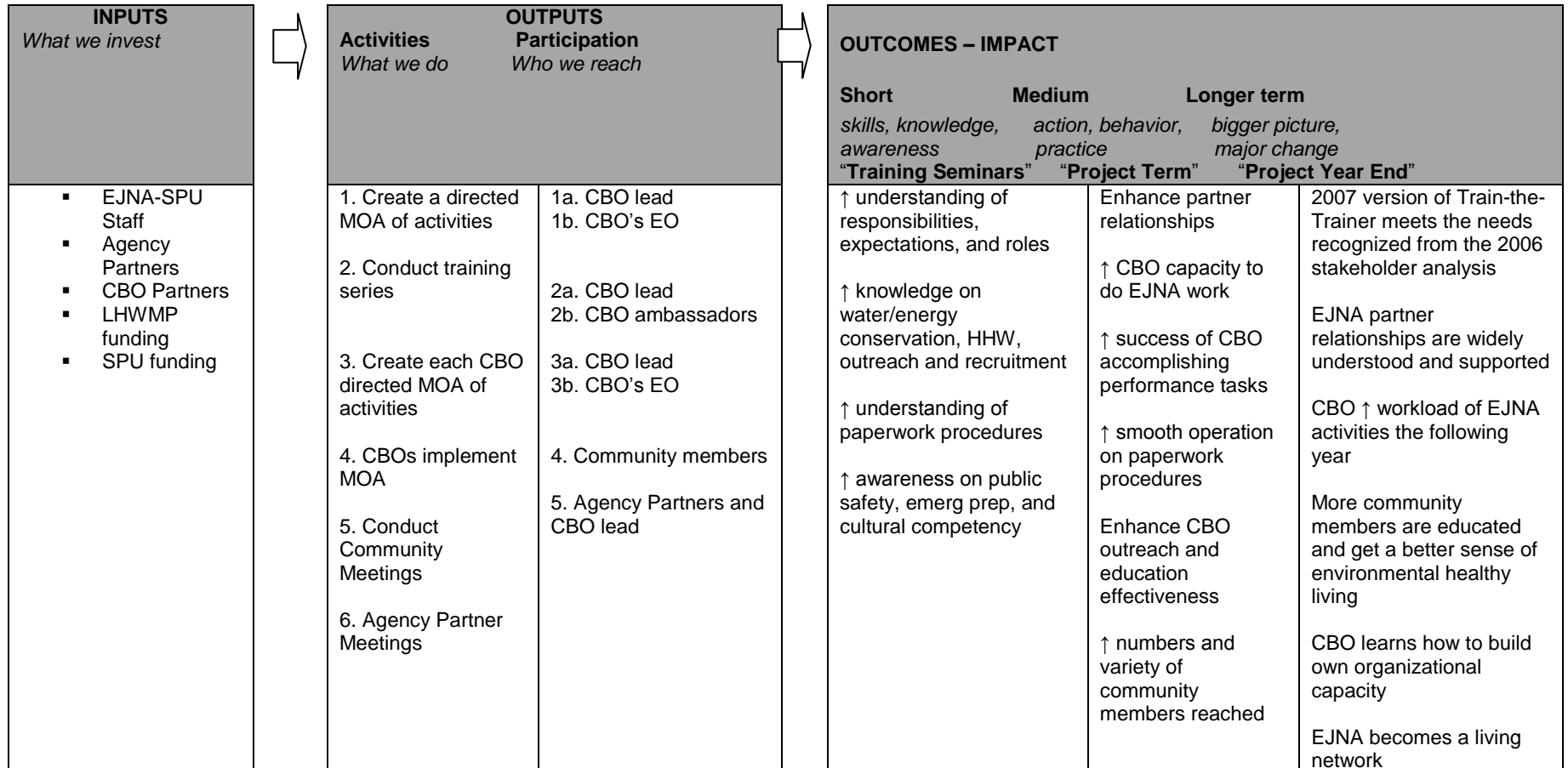
## Appendix 1 SPU Organizational Chart



## Appendix 2 Program Roadmap

**Situation:** EJNA's target population for service is historically underserved communities (immigrants and refugees, ethnic minorities, etc). EJNA's Train-the-Trainer model partners with local CBOs to deliver environmental health information to their HUCs for more impactful behavior changes that improves the quality HUC's lives and their environment.

**Mission:** To enhance and protect environmental health and to reduce environmental threat for historically underserved populations by being a catalyst for change and building community and local government capacity.



### Appendix 3

#### 2008 CBO Work plan Example

Task Description	Staffing	Notes/Description	FUNDING
5 Monthly Meetings (May-Sept)	1-2 CBO staff  2 Ambassadors <i>(2 meetings per ambassador)</i>	Funding includes preparation, travel, attendance, and follow-up. <i>(Reduced funding if miss meetings)</i>  Dates and Times: 1. Tues May 6, 6 PM to 8 PM 2. Tues June 3, 6 PM to 8 PM 3. Tues June 26, 6 PM to 8 PM 4. Tues Aug 7, 6 PM to 8 PM 5. Tues Sept 25, 6 PM to 8 PM	\$180 total per meeting for CBO staff attending  \$45 per meeting per ambassador attending ----- <b>MAX: \$1,080</b>
8 Monthly Tag Meetings (Feb-Sept)	1-2 CBO staff  2 Ambassadors <i>(2 meetings per ambassador)</i>  CBO Director <i>(as needed)</i>	Funding includes preparation, travel, attendance, and follow-up. <i>(Reduced funding if miss meetings)</i>  Tentative meeting topics: 1. Feedback on graphic designer drafts 2. Festival planning 3. <del>Reporting forms</del>	\$120 total per meeting for CBO staff attending  \$30 per meeting per ambassador attending ----- <b>MAX: \$1,080</b>
36 hrs Trainings (Feb-April)	1-2 CBO staff 2 Ambassadors	Funding includes travel, attendance, and homework. <i>(Reduced funding if miss trainings)</i>  Dates and Times: 1. Sat Feb 9, 9 AM to 4 PM 2. Tues Feb 19, 6 PM to 9 PM 3. Thurs Feb 21, 6 PM to 9 PM 4. Sat March 8, 9 AM to 4 PM 5. Tues March 25, 6 PM to 9 PM 6. Thurs March 27, 6 PM to 9 PM 7. Sat April 5, 9 AM to 4 PM	\$840 total per month for CBO staff attending  \$210 per month per ambassador attending ----- <b>MAX: \$3,780</b>

Year-End Presentation	1-2 CBO staff 2 Ambassadors CBO Director	Funding includes preparation, practice, supplies, travel, and attendance. <i>(Reduced funding if unable to attend)</i>  Thurs Oct 16, 6 PM to 9 PM	\$450 total for Planning & Expenses  \$240 total for CBO staff attending  \$60 per ambassador attending ----- <b>MAX: \$810</b>
Ambassador Recruitment and Orientation	1-2 CBO staff 2 Ambassadors	Funding includes time for recruiting ambassadors, giving an orientation, preparing work schedules, and paying ambassadors for attending orientation.	\$200 total for Planning and Orientation ----- <b>MAX: \$200</b>
Joint ECO Village Festival at Juneteenth	1-2 CBO staff 2 Ambassadors	Funding includes planning, setup and breakdown, travel, and attendance. <i>(Reduced funding if unable to attend)</i>  <i>SPU will pay for booth space separately.</i>  <i>Complete reporting forms must be submitted for payment.</i>	\$200 total for Planning & Expenses  \$300 total for CBO staff attending  \$150 total for ambassador attending ----- <b>MAX: \$650</b>
CBO-selected festival (1 Day)	1-2 CBO staff 2 Ambassadors	Funding includes planning, setup and breakdown, travel, and attendance. <i>(Reduced funding if unable to attend)</i>  <i>SPU will pay for booth space separately.</i>  <i>Complete reporting forms must be submitted for payment.</i>	\$320 total for Planning & Expenses  \$720 total for CBO staff attending  \$360 total for ambassador attending ----- <b>MAX: \$1,400</b>
Overhead	N/A	Funding includes time for invoicing, preparing ambassador payments, and additional administrative overhead, not to exceed 10% of total spending.	<b>\$1,000</b>

**TOTAL MAXIMUM POSSIBLE: \$10,000**

## Appendix 4

### *SPU RSJ Workplan*

#### Race and Social Justice Work Plan For the Period January 1 to December 31, 2008

Department:	Seattle Public Utilities	Director:	Chuck Clarke	Date of Update:	December 21, 2007
		RSJI Work Plan Lead:	Sharon King		
		Change Team Lead:	Timothy Croll and Christina Humbergs	Executive Sponsor	Liz Kelly, Director

Desired Outcome(s)	Key Action(s)	Measure(s) and Target(s)	Due Date(s) Mo/Yr	Staff assigned	Result(s)
<b>Business lines, programs, services and activities are culturally and linguistically accessible and appropriate</b>	The City's policy on translation and interpretation is implemented.	Translation and interpretation services are provided for the Department's major projects and events. The Department's vital documents are translated.	Aug. 20, 2008	Ticiang Diangson, EJSE Director	
	Determine which City positions warrant bilingual skills as a preferred attribute, modify the City's hiring policies and practices as appropriate, and recruit candidates accordingly.	Pending 1Q08 planning discussion		Norma Middleton, HR Director	
	Use RSJI best practices criteria ( <b>available 3/08</b> ) to assess and make improvements to programs and services. Identify best	Pending 1Q08 planning discussion		Ticiang Diangson, EJSE Director	

Desired Outcome(s)	Key Action(s)	Measure(s) and Target(s)	Due Date(s) Mo/Yr	Staff assigned	Result(s)
	practices.				
<b>Racism is eliminated and multiculturalism promoted within the department's policies and procedures</b>	Use the race equity policy filter <b>(available 3/08)</b> to determine the impacts of newly proposed or updated policies (including budget and legislation) on racial and ethnic groups in the community	Pending 1Q08 planning discussion		Ticiang Diangson, EJSE Director	
<b>Business lines contribute to a reduction in racial / ethnic disparities in the areas of health, education, criminal justice, environmental justice, or income and wealth accumulation</b>	Identify disparities targeted for reduction. Use RSJI best practices criteria <b>(available 3/08)</b> to assess and make improvements to programs. Develop program specific outcome data to be tracked.	Pending 1Q08 planning discussion		Ticiang Diangson, EJSE Director	
<b>Economic Equity</b> – Department shall be inclusive of underrepresented business communities.	The Department ensures equitable use of WMBE firms for purchasing and consulting <b>(focus on recruiting African American, Native American and Latino firms).</b>	Complete annual outreach plan and report on use of WMBE firms each quarter. (Note: DEA is establishing annual targets.)	Feb. 2008 (dates TBD)	Ticiang Diangson, EJSE Director	
<b>Workforce Equity</b> – City of Seattle workforce is representative of the city's diversity across all levels and functions.	Implement succession planning efforts to ensure employees opportunities for development or advancement and vacancies in key	Pending 1Q08 planning discussion		Norma Middleton, HR Director	

Desired Outcome(s)	Key Action(s)	Measure(s) and Target(s)	Due Date(s) Mo/Yr	Staff assigned	Result(s)
	positions are anticipated and planned for				
	Complete work that complements the citywide workforce equity analysis, develop department-specific remedies and implement priorities.	Pending 1Q08 planning discussion		Norma Middleton, HR Director	
Departmental leadership is accountable for implementation of RSJI work plans.	APEX / SAM accountability agreements will be inclusive of departmental RSJI work plan items.	2007 Implemented. 2008 Assessment.		Norma Middleton, HR Director	4Q07 implemented
<b>Public Engagement</b> – the City's public engagement processes are intentionally multicultural.	Implement culturally appropriate, relevant and inclusive public engagement processes.	Pending 1Q08 planning discussion of Public Engagement IDT recommendations.		Liz Kelly, Director of Office of Asset Mgmt	
<b>Capacity Building</b> – The City's managers and leaders are committed to eliminating institutional racism from the City's programs, policies and procedures.	Department managers participate in Race and Social Justice Training (includes three segments: "Race, the Power of an Illusion," Basic Anti-Racism and Anti-Racism Skill Building for Managers)	HR implements training with input from RSJ Steering committee. RSJ Change Team specifies expectations and decides on deliverables. Implemented 1Q07 follow-up; and evaluations to be conducted in 2008.		Laura Southard, HR Training Manager	
City employees are introduced to the Race and Social Justice Initiative and have a common understanding of institutionalized racism.	City employees participate in RSJI training, including an intro to RSJI and facilitated training using "Race: the	All employees complete training. Implemented 1Q07 follow-up; and evaluations to be conducted in 2008.		Laura Southard, HR Training Manager	

Desired Outcome(s)	Key Action(s)	Measure(s) and Target(s)	Due Date(s) Mo/Yr	Staff assigned	Result(s)
	Power of an Illusion.”				
	A plan is in place for providing anti-racism training to new employees as they join the department.	Pending 1Q08 planning discussion			



## **Appendix 5**

### ***List of Interviews***

#### **Seattle Public Utilities**

##### *Customer Service Branch*

1. Shirley Axelrod, Resource Conservation
2. Arece Hampton, Resource Conservation
3. Tracey Rowlands, Resource Conservation
4. Carl Woestwin, Resource Conservation
5. Brett Stav, Administration
6. Dee Dhalami, Administration
7. Linda Jones, Environmental Partnerships Team
8. Tom Gannon, Solid Waste Contracts
9. Pat Kaufman, Environmental Partnerships Team
10. Anthony Matlock, Environmental Partnerships Team
11. Marcia Rutan, Solid Waste Contracts

##### *Director's Office*

12. Sharon White, SPU Assistant Director
13. Marget Chappel, Environmental Justice Social Equity Division
14. Ticiang Diangson, Environmental Justice Social Equity Division
15. Sharon King, Environmental Justice and Social Equity Division
16. Veronica Fincher, Environmental Justice and Social Equity Division

#### **Other City/County Departments**

17. Stella Chao, Department of Neighborhoods Director
18. PJ Redmond, Seattle & King County Department of Health, Vulnerable Populations Action Team

#### **Non-Profit Organizations and Other Community-Based Organizations**

19. Yolanda Quiroga, St. Mary's Church
20. Joyce Pisanont, International District Housing Alliance
21. Kevin Burrell, ECOSS
22. Jeanne Johnson, ECOSS

## **Appendix 6**

### ***Interview Questions***

1. Can you give me a little background on your work with RSJI ?
2. How has SPU successfully engaged ethnic minorities in WPR?
3. What do you believe is effective outreach to ethnic minorities?
4. How can SPU help engage ethnic minorities in WPR aside from providing monetary resources?
5. What are your thoughts on the EJNA's train-the-trainer model? Do you feel there are other approaches that should be considered?
6. What environmental issues are most important for ethnic minorities?
7. What are the primary barriers to having an effective dialogue with ethnic minorities about WPR?
8. What specific strategies might used to address these challenges?
9. What is SPU currently doing well to engage minority populations?
10. If trying to institutionalize RSJI within a local utility department, what do you believe are the best actions to take?
11. Do you know of other city environmental departments that are working on promoting service equity in some way?
12. Do you have anything else you would like to share?
13. Do you have suggestions for others to contact?

## Appendix 7

### *Field Trips and Activities*

Activity	Description	Length of Tour	Max. Capacity	Age Limit	Clothing Requirements	Expected Outcomes
Cedar River Watershed	This 3 hour tour by bus and by foot into the 91,339-acre protected watershed	5 hours	45	10+ years	Closed toed shoes Sweatshirt or jacket Long pants or long skirt Optional: insect repellent, sunscreen	<ul style="list-style-type: none"> <li>◆ To know where our water comes from</li> <li>◆ How habitat plays a part in water quality</li> </ul>
Transfer Station & HHW	Tour of Seattle's garbage, recycling and household hazardous waste facilities	2 hours	30	10+ years	Closed toed shoes Long pants/skirt  Hard hats & goggles are required & provided by facility	<ul style="list-style-type: none"> <li>◆ Understand what happens to our garbage and recycling materials</li> <li>◆ How this links to clean air, water and use of natural resources</li> </ul>
Duwamish Tour	Tour the Duwamish River with BJ Cunningham with the Duwamish River Cleanup Coalition	6 hours	60	10+ years	Tour is on a boat so dress for the weather	<ul style="list-style-type: none"> <li>◆ Find out about what is being done to clean up the Duwamish which was listed as a superfund clean up site by the EPA</li> <li>◆ Find out about consuming fish or other marine life from the river</li> </ul>
University of Washington	Tour the Environmental Health/Toxicology labs and learn about some of the cutting edge research that is going on at UW	3 hours	25	10+ years		<ul style="list-style-type: none"> <li>◆ See what a working lab looks like</li> <li>◆ Learn about some of the methods researchers use to study how chemicals affect the body</li> <li>◆ Learn how research results can make public health policies.</li> </ul>
Water Quality lab	Tour of lab that shows how the water is tested	2 hours	30	10+ years	Close toed shoes	<ul style="list-style-type: none"> <li>◆ To know how the water is tested for purity, color &amp; taste</li> </ul>

	for purity, taste & color				Lab coats & goggles are required & provided by facility	
Longfellow Creek/ High Point Natural Drainage System	Tour in West Seattle to experience restoration of an urban creek and neighborhood that helps improve water quality and the natural environment	4 hours combining walking and van tour)	15-20	10+ years	Tour is outside so dress for the weather (sturdy shoes, raingear)	<ul style="list-style-type: none"> <li>◆ Where does our water go</li> <li>◆ What can we do to protect and improve water quality and habitat</li> <li>◆ Understand impact of stewardship and partnership opportunities</li> </ul>
West Point Treatment Plant	Tour inside & outside of the Westpoint treatment facility with education specialist	4 hours	35	11+ years	Close toed shoes  Tour is inside & outside so dress for the weather	<ul style="list-style-type: none"> <li>◆ Where does sewage go</li> <li>◆ What is done to treat it before it is discharged</li> <li>◆ Where is it being discharged/released</li> <li>◆ What are second or non drinking uses for treated water</li> </ul>
Reuse Store	Tour of store where community members can pick up earth friendly household items for free	45 min		10+ years	Tour is outside so dress for the weather	<ul style="list-style-type: none"> <li>◆ Proper label reading to make a more informed selection of household products</li> </ul>

## References

- American Fact Finder web site, Accessed 6/5/08 at  
[http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
- California Integrated Waste Management Board web site. Accessed 2/18/08 at  
<http://www.ciwmb.ca.gov/LGlibrary/Innovations/DiversePops/>
- Center for Health and Social Inequalities Research at Portland State University, Accessed on 3/12/08 at <http://www.sociology.pdx.edu/CHSIR/index.php>
- City of Seattle Residential Customer Service Survey (2007). Accessed 1/5/08 through 5/31/08 at SPU Intranet website at <http://spuweb/rsj/default.htm>
- Cohen, Aubrey. Seattle PI. 8/9/07: *Diversity Grows as King County Sees More Minorities*. Accessed on 6/5/08 at  
[http://seattlepi.nwsourc.com/local/326928\\_census09.html](http://seattlepi.nwsourc.com/local/326928_census09.html)
- Electronic Green Journal (2004). Irwin Weintraub. Fighting Environmental Racism: A Selected Annotated Bibliography. Accessed 3/12/08 at  
<http://www.mapcruzin.com/EI/ejgc.html>
- Environmental Coalition of South Seattle website, Accessed on 5/2/08 at  
<http://ecoss.org/about/index.htm>
- Environmental Health Perspectives website, Accessed on 6/11/08 at:  
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1392242>
- Environmental Justice Network in Action Annual Report (2006). SPU Internal document. Environmental Justice Network in Action Needs Assessment (2001-2004). Accessed at  
[http://www.seattle.gov/util/About\\_SPU/Management/SPU\\_&\\_the\\_Environment/Environmental\\_Justice/index.asp](http://www.seattle.gov/util/About_SPU/Management/SPU_&_the_Environment/Environmental_Justice/index.asp)
- International District Housing Alliance website, Accessed 5/2/2005 at  
<http://www.idhousingalliance.org/>
- Seattle City Council web page, Accessed 1/22/08 at  
<http://www.seattle.gov/council/conlin/miw.htm>
- Seattle Department of Planning, Accessed 2/18/08 at  
[http://www.seattle.gov/humanservices/community\\_development/conplan/plan/CP\\_2005\\_Community\\_Profile\\_Demographic\\_Trends\\_X.pdf](http://www.seattle.gov/humanservices/community_development/conplan/plan/CP_2005_Community_Profile_Demographic_Trends_X.pdf)

Seattle Office of the Mayor's website, Accessed on 4/10/08 at  
<http://www.seattle.gov/mayor/issues/rsji/whatIsRSJI.htm>

Seattle Public Utilities Focus Group Report: Attitudes Toward Solid Waste Service in the City of Seattle. (2006). Internal report produced by George Cheung and Associates.

Seattle Public Utilities Intranet (internal access only) web site, Accessed on 4/6/08 at  
<http://spuweb/rsj/default.htm>

Seattle Public Utilities website, Accessed on 1/5/08 through 5/31/08 at:  
[http://www.pan.ci.seattle.wa.us/util/About\\_SPU/Garbage\\_System/Contracts/SPU01\\_003463.asp](http://www.pan.ci.seattle.wa.us/util/About_SPU/Garbage_System/Contracts/SPU01_003463.asp)

Seattle Public Utilities website, <http://www.ci.seattle.wa.us/util/services/>

The U.S. Department of Housing and Urban Development. Accessed May 18, 2007.  
*Environmental Justice*, Executive Order 12898,  
[www.hud.gov/offices/fheo/FHLaws/EXO12898.cfm](http://www.hud.gov/offices/fheo/FHLaws/EXO12898.cfm)

Underground Infrastructure Management Online Newsletter, 2005. *Delivering Core Services: Seattle Mayor Greg Nickels Sticks to the Basics*. Accessed on January 1, 2008 at: <http://uimonline.net/index/webapp-stories-action?id=18&archive=yes&Issue=2005-05-01>

U.S. EPA website, Accessed 2/16/08 at:  
<http://www.epa.gov/compliance/environmentaljustice/>

Wikipedia website, accessed 3/12/08 at:  
[http://en.wikipedia.org/wiki/Environmental\\_justice](http://en.wikipedia.org/wiki/Environmental_justice)

